

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

-----X
UNITED STATES, et al., : Civil Action No.:
 : 1:23-cv-108
 :
 : Plaintiffs, :
 :
 : versus : Tuesday, September 17, 2024
 : Alexandria, Virginia
 :
 : GOOGLE LLC, : Day 7 p.m.
 : Pages 1-155
 :
 : Defendant. :
-----X

The above-entitled bench trial was heard before the
Honorable Leonie M. Brinkema, United States District Judge.
This proceeding commenced at 2:00 p.m.

A P P E A R A N C E S:

FOR THE PLAINTIFFS: GERARD MENE, ESQUIRE
OFFICE OF THE UNITED STATES ATTORNEY
2100 Jamieson Avenue
Alexandria, Virginia 22314
(703) 299-3700

JULIA TARVER WOOD, ESQUIRE
AARON TEITELBAUM, ESQUIRE
TIMOTHY LONGMAN, ESQUIRE
JEFFREY VERNON, ESQUIRE
MICHAEL WOLIN, ESQUIRE
UNITED STATES DEPARTMENT OF JUSTICE
ANTITRUST DIVISION
450 Fifth Street, NW
Washington, D.C. 20530
(202) 894-4266

(State of VA) TYLER HENRY, ESQUIRE
OFFICE OF THE ATTORNEY GENERAL
OFFICE OF THE SOLICITOR GENERAL
202 North Ninth Street
Richmond, Virginia 23219
(804) 786-7704

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P R O C E E D I N G S

FOR THE DEFENDANT: CRAIG REILLY, ESQUIRE
LAW OFFICE OF CRAIG C. REILLY
209 Madison Street
Suite 501
Alexandria, Virginia 22314
(703) 549-5354

KAREN DUNN, ESQUIRE
JEANNIE RHEE, ESQUIRE
ANITA LIU, ESQUIRE
WILLIAM ISAACSON, ESQUIRE
PAUL, WEISS, RIFKIND,
WHARTON & GARRISON LLP
2001 K Street, NW
Washington, D.C. 20006
(202) 223-7300

COURT REPORTER: RHONDA F. MONTGOMERY, CCR, RPR
Official Court Reporter
United States District Court
401 Courthouse Square
Alexandria, Virginia 22314
(703) 299-4599
RMontgomery@courtreport.net

1	TABLE OF CONTENTS
2	WITNESSES
3	On behalf of the Plaintiffs:
4	NIRMAL JAYARAM
5	Cross-examination by Ms. Rhee4
6	Redirect examination by Ms. Wood17
6	Recross examination by Ms. Rhee39
7	TIM CADOGAN
8	Direct examination by tim cadogan45
9	Cross-examination by Mr. Justus69
9	Redirect examination by Mr. Vernon101
10	BRIAN O'KELLEY (video).....110
11	JEREMY HELFAND (read in).....113
12	SUSAN SCHIEKOFFER (read in).....136
13	
14	MISCELLANY
15	Proceedings September 17, 20244
16	Certificate of Court Reporter155

17
18
19
20
21
22
23
24
25

Direct Examination - N. Jayaram

P R O C E E D I N G S

THE COURT: Are you ready, Ms. Rhee?

MS. RHEE: Yes, Your Honor. I believe where we left off of before the lunch break was PTX 402.

So if I could have Mr. Spalding's assistance in pulling that up.

CROSS-EXAMINATION

BY MS. RHEE

Q And Mr. Jayaram, if you could really make sure to keep your voice up and let the court reporter be able to take down everything you say. Okay?

A Okay.

Q Okay. Great. Thank you.

You remember talking at length, again, with the government about this document and we were quickly going over it before the lunch break?

A Yes.

Q Okay. I want to direct your attention towards the bottom of the first page in terms of action items.

MS. RHEE: Thank you so much, Mr. Spalding.

BY MS. RHEE

Q Okay. And you see here one of the action items that was not talked about in your direct examination is, "Think about long-term competitive risks that solutions by companies like Facebook + Amazon present." Do you see that?

Direct Examination - N. Jayaram

1 A Yes.

2 Q And I know you've already testified that you don't
3 remember much about either this document or header bidding,
4 but with respect to this bullet just talking about the
5 competitive risks or the competitive threat of Facebook and
6 Amazon, during your time on the buy-side with respect to
7 those buy-side tools, do they pose a competitive threat?

8 A Yes.

9 Q Now, you were also shown on direct examination PTX
10 1545.

11 MS. RHEE: So if I could have your
12 assistance, Mr. Spalding.

13 BY MS. RHEE

14 Q And on direct examination, you said something about how
15 the goal of this controlled experiment was about
16 incrementality or incremental inventory. Do you remember
17 that?

18 A I do.

19 Q Okay. Could you explain to the Court what the object
20 of this controlled experiment was and why you used those
21 terms incrementality?

22 A So if a domain is incremental --

23 (Reporter clarification.)

24 A If a supply path is --

25 (Reporter clarification.)

Direct Examination - N. Jayaram

1 A If a supply path --

2 THE COURT: Supply path.

3 BY MS. RHEE

4 Q Or domain was the first word; is that right?

5 A Yes.

6 Q Okay.

7 A -- is incremental, what we expect is if we don't buy on
8 that supply path or domain, then will lose that -- those
9 impressions or the conversions.

10 And on the worst, if it is not incremental, what
11 expect is -- even if you stop buying, nothing changes in the
12 top line.

13 So what we were trying to do with this particular
14 experiment is to measure the extent of incrementality of the
15 different domains that are here. So we'd had an experiment
16 where we don't buy on some domains to get a sense of how
17 incremental or not incremental those domains are, supply
18 paths are.

19 Q And when you say domains, you're talking about either
20 websites, apps, or other publisher inventory; is that -- I
21 just want to make sure we know what we're talking about.

22 A That is correct.

23 Q Okay. Now, did -- and I take it that this
24 experiment -- was it run on DV360 or what was referred to as
25 DBM at the time?

Direct Examination - N. Jayaram

1 A Yes.

2 Q Okay. Now, DV360 or DBM ever actually stop bidding on
3 any domains that ran header bidding real life versus your
4 control experiment?

5 A No.

6 Q And so in other words, Mr. Jayaram, is this an example
7 of a control experiment that you ran but didn't actually
8 follow up on in real life?

9 A Yes.

10 Q Now, in connection, again, with the discussion that you
11 had in the back and forth with the government attorney about
12 header bidding, you answered with respect to PTX 1520 that
13 there are some conditions where it's not good for
14 advertisers to win. Do you remember that exchange?

15 A Yes.

16 Q Okay. Now, can you explain for the Court what you
17 meant and why you think sometimes it's not good for
18 advertisers to win?

19 A That is always a price component to winning.

20 (Reporter clarification.)

21 Q Sorry. You've got to speak up and speak more clearly
22 for the court reporter, Mr. Jayaram.

23 A That is always a pricing component to winning. We
24 could bid a million dollars for every auction and win
25 everything, but it's going to be really bad for advertisers.

Direct Examination - N. Jayaram

1 So what we hope to achieve is winning impressions for
2 advertisers based on the value that they are going to derive
3 from the impression, the price that they are going to pay,
4 and whether it helps them achieve their objectives and
5 constraints that they have given us.

6 Q Okay. Now, you were shown yet another header bidding
7 document from the government examination, and this time it's
8 PTX 588. And if we could turn your attention in particular
9 to the fifth paragraph down --

10 MS. RHEE: And blow that up -- oh, no. Wrong
11 paragraph. The paragraph -- yes, thank you.

12 BY MS. RHEE

13 Q Do you see that paragraph in front of you on the
14 screen, Mr. Jayaram?

15 A Yes.

16 Q Okay. And you say, "We can be more aggressive at our
17 bidding strategy up to no longer buying cross exchange but
18 this will come at a price. TDD" -- The Trade Desk --
19 "Amazon, and Facebook and others will not have any reasons
20 to not buy HB inventory. And as such, DBM" -- or DV360 --
21 "would lock itself out of an auction that all these guy have
22 access to."

23 Do you see that?

24 A I do.

25 Q Okay. And again, during the time that you have been on

Direct Examination - N. Jayaram

1 the buy-side, does The Trade Desk pose competition for you?

2 A Yes.

3 Q Amazon?

4 A Yes.

5 Q Facebook?

6 A Yes.

7 Q And others that you don't actually specify here?

8 A There is lots of competition for us.

9 Q Okay. And so when you say, "Well, we could be more
10 aggressive in our bidding strategy up to no longer buying
11 cross-exchange," in real life, have you ever implemented a
12 strategy or a product feature that stops buying
13 cross-exchange for DV360?

14 A No.

15 Q And now, pulling up this whole discussion, if you can
16 see, who is the author of these various -- well, you are the
17 author at the top. But in terms of the middle section that
18 the government spent some time with you on, who is the
19 actual author of all of these points?

20 A Tobias Maurer, M-A-U-R-E-R.

21 Q And you're not Tobias, I take it?

22 A I am not Tobias.

23 Q Now, finally, just ending on AWBid, which is a product
24 feature that you actually worked on because it comes from
25 the buys-side, I want to direct your attention to PTX 791.

Direct Examination - N. Jayaram

1 MS. RHEE: And with profuse apologies, this
2 is a document that we would just like to pass out at
3 this time because it was not in the binder.

4 THE COURT: Is there any objection?

5 MS. WOOD: No objection, Your Honor.

6 THE COURT: I assume you are moving it in.
7 It's in.

8 MS. RHEE: Thank you for just moving this
9 along.

10 BY MS. RHEE

11 Q Okay. And, Mr. Jayaram, if I could direct your
12 attention to the Bates number ending in 224.

13 And you see, again, this is now an AWBid
14 presentation from November 2019. So we're moving on forward
15 in time. What do you see as the first bullet in continued
16 ad channels?

17 A Latency continues to be a challenge.

18 MS. RHEE: Okay. And just pausing on that
19 latency point, if we could go to the slide that
20 precedes this one, which is Bates stamp ending 223,
21 including the notes at the bottom.

22 BY MS. RHEE

23 Q You see here that there is more detail with respect to
24 latency that says 107 milliseconds, 95 percent at BOW for
25 matched queries?

Direct Examination - N. Jayaram

1 A Yes.

2 Q Okay. What does that mean for those of us who don't
3 speak engineering?

4 A That means for 95 percent of these ad request, we
5 managed to return a bid in 107 milliseconds.

6 Q Okay. And then when you compare that, 107
7 milliseconds, to the next slide where you talk about
8 continued AWBid challenges, what are the latency deadlines
9 that you are reporting out here?

10 A So even at this time, most of the AWBid exchanges had
11 800 to 100 millisecond deadlines that we have to try and
12 return a bid under.

13 Q So for those, again, who are not engineers, I take it
14 those that 107 is longer than the deadline that's laid out
15 here?

16 A That's correct.

17 Q Okay. So now, going back to slide 223, in the talking
18 points below --

19 MS. RHEE: If we could, blow that up --

20 BY MS. RHEE

21 Q -- the presentation notes most of the AWBid eligible
22 queries are also eligible for DBM. What does that mean?

23 A It means that DBM is already buying on these requests,
24 that AWBid is participating in.

25 Q So, again, just to make sure everybody is on the same

Direct Examination - N. Jayaram

1 page, AWBid is about third-party exchange bidding for Google
2 Ads customers, right?

3 A Yes.

4 Q And that's different than the ability for DV3 customers
5 to bid on third-party exchanges, right?

6 A Yes.

7 Q Okay. But this note is saying what when you're talking
8 about the comparison between the Google Ads' customers, as
9 well as the DV3 customers?

10 A Yes.

11 Q When you say yes, what do you mean? What's the
12 comparison actually noting?

13 A So what it's showing is if you look at all the exchange
14 matched queries, which is going to be dominated by DBM, the
15 latency is around 89 milliseconds. But on the -- at least
16 for the AWBid ones, I think it was higher than 107.

17 Q Okay. Now, let's go back to slide 224. And when this
18 presentation notes in 2019 -- this is, again, the end of
19 2019 -- "Spam: It's a wild world out there," what do you
20 take from that, and what did you observe?

21 A AWBid traffic has consistently had higher spam rates
22 compared to AdX. It's also been more difficult to detect
23 spam on AWBid because of lack of certain signals and direct
24 publisher relationships. So it's just pointing to a
25 continued investment in the space that would be necessary to

Direct Examination - N. Jayaram

1 keep spam under control.

2 Q And the AWBid challenges continue and spill over onto
3 the next slide.

4 MS. RHEE: So if we could go to that next
5 slide and blow that up as well.

6 BY MS. RHEE

7 Q You see AWBid challenges continued, yes?

8 A Yes.

9 Q Okay. And the first bullet under that is, "Exchange
10 bills discrepancy aka view loss." Again, what does that
11 mean for somebody who is not an engineer?

12 A So I alluded to this earlier, which is when Google
13 looks at our own logs data, we think that we won a certain
14 number of impressions and we -- we need to pay the exchange
15 a certain amount of money. But when we get the invoice from
16 the exchange, lots of times it doesn't match the impression
17 count, as well as the payout numbers are different. And
18 that's what it's called exchange billing discrepancy, which
19 is something that we've had to manage.

20 Q Okay. And then the last two bullets are not in such
21 difficult language. Here, for a continued AWBid challenge,
22 why in 2019 is a continued challenge "brand safety/domain
23 misrepresentation"?

24 A Domain misrepresentation, sometimes we believe that a
25 certain request is coming from a particular publisher, but

Direct Examination - N. Jayaram

1 it may not be the case. To solve this was one of the
2 reasons why Ads.exe (phonetic) was launched a couple of
3 years ago. You know, they continue to be a challenge.

4 Brand safety is also a continued challenge because
5 we need to understand why these ads are showing and will the
6 advertiser be okay with it. The policies that the exchanges
7 have may not match the policies that other advertisers have.
8 So they may say, "I don't want my ads to appear next to
9 gambling content. So it is our responsibility to identify
10 such content and make sure that our advertisers' ads are not
11 showing in that place.

12 Q Now, finally, I just want to talk about AWBid pricing
13 and AWBid expansion. So, the first question is we talked
14 about the AWBid launch and the AWBid focus initially at
15 least on remarketing. Do you remember that?

16 A Yes.

17 Q Okay. Did there come a time where at least from the
18 buy-side there was value in expanding the AWBid program to
19 include contextual interests and contextual keywords?

20 A Yes.

21 Q Okay. Can you explain for the Court what those types
22 of targeting and buying on third-party exchanges represents?

23 A Keyword targeting refers to the case where the
24 advertiser wants their ads on pages which have certain
25 keywords. It could be running for example. Interests

Direct Examination - N. Jayaram

1 category typically refers to the user interests. So the
2 advertiser might say, "I want my ads to be shown to users
3 who like running." And these types of targeting are much
4 harder in practice compared to etargeting (phonetic) because
5 this involves building complex models around the user,
6 around the page, and being able to on the fly retrieve this
7 information about the user and the page to figure out which
8 ads should be legible.

9 Yeah. So it took us -- a lot of time to build
10 these features out because of several AWBid challenges. And
11 eventually, we did build it out.

12 Q Now, with respect to rev share for contextual interests
13 and contextual keywords, do you know how much AWBid takes as
14 rev share in order to allow Google Ads advertising customers
15 to bid on third-party exchanges for contextual interests and
16 for contextual keywords?

17 A At the time of the launch of those products, it was
18 50 percent but --

19 THE COURT: I'm sorry. How much?

20 THE WITNESS: Five zero.

21 A But now that number is 32 percent.

22 Q Now, why is it so expensive and why was it so expensive
23 at the time that you launched the AWBid expansion to
24 contextual interests and contextual keywords?

25 A One of the issues I mentioned earlier about AWBid is

Direct Examination - N. Jayaram

1 the duplicate calls. And it's expensive to build and use
2 those user and page models as I explained earlier. And now
3 when we have to do it multiple times for the same ad
4 opportunity, the costs really adds up. And we are at a
5 point where we were running experiments, but we were not
6 able to launch it because of the high machine costs. And we
7 went with the higher margin at the time to be able to make
8 the launch happen. And over the years, those products
9 stabilized, and we have been able to move those margins down
10 to 32 percent now.

11 Q Now, with respect to remarketing, which is how AWBId
12 originally launched -- and I take it that AWBId still
13 continues to allow Google Ads' advertisers to buy on
14 third-party exchanges for remarketing, yes?

15 A Yes.

16 Q Okay. And how much does the Google Ads' buy-side team
17 take as a percentage of rev share for AWBId remarketing?

18 A 32 percent.

19 Q And, again, why so much?

20 A There are a few reasons. Between 2016 and 2018, we had
21 a 15 percent margin on remarketing. But over the period, we
22 ran into a few issues. One was billing discrepancies, which
23 meant that we sometimes had to pay the exchange more than
24 what we anticipated, which is going eat into the profits.

25 The second issue is the machine costs. Even today

Redirect Examination - N. Jayaram

1 running AWBid is more expensive from a machine costs
2 perspective for the revenue generated.

3 Third, it's because of the spam refunds that we've
4 had to make to advertisers with the highest spam rates.

5 And lastly, there is original costs to integration
6 and building all of these systems to be able to ramp up
7 AWBid.

8 So these costs add up, and that was one of the
9 reasons why the 15 percent number moved to 32 percent
10 towards the end of 2018.

11 MS. RHEE: I think at this time, Your Honor,
12 no further questions, and we'll pass the witness.

13 THE COURT: All right. Ms. Wood, any
14 redirect?

15 MS. WOOD: Yes, Your Honor, briefly.

16 REDIRECT EXAMINATION

17 BY MS. WOOD

18 Q Mr. Jayaram, do you remember your lawyer asked you
19 about open-web display? Do you remember that?

20 A Yes.

21 Q And you talked about your understanding of open-web
22 display was it meant free access to content versus paid
23 access. Do you remember that?

24 A Yes.

25 MS. RHEE: Objection, Your Honor. That

Redirect Examination - N. Jayaram

1 mischaracterizes the testimony, but I'm happy to have
2 the witness answer.

3 THE COURT: I am overruling the objection.
4 That's pretty much what I heard as well.

5 BY MS. WOOD

6 Q You understand the term "walled garden"; don't you?

7 A Yes.

8 Q And you would agree with me that Facebook operates a
9 walled garden ad tech ecosystem, right?

10 A I think there was a time at least when Facebook allowed
11 certain buyers to buy into ads on Facebook.

12 Q Okay. And when Facebook offers ad tech products,
13 Facebook doesn't allow publishers to sell display inventory
14 on their websites using Facebook's ad tech tools, correct?

15 A I'm not sure that's correct.

16 Q Are you're aware that *The Wall Street Journal* can't
17 sell its website inventory using Facebook's ad tech tools?

18 A My understanding is Facebook has built or is building
19 some technologies which can be used by publishers running
20 their own ad servers. So I'm not sure if that statement is
21 correct at this point.

22 Q All right. You understand that Facebook doesn't offer
23 a third-party publisher ad server to websites like *The Wall*
24 *Street Journal*, correct?

25 A Yes.

Redirect Examination - N. Jayaram

1 Q And you understand that Amazon doesn't operate a
2 publisher ad server that allows entities like *The Wall*
3 *Street Journal* to sell their ad display inventory, correct?

4 A I don't know.

5 Q Okay. And so you don't really no what walled garden
6 means in this context in terms of ad tech tools that are
7 used only for owned-and-operated properties?

8 A I have my own interpretation of walled garden. I don't
9 know if it matches with yours.

10 Q Okay. You talked a lot about the experiments you run
11 and the metrics that you use and the different categories of
12 experiments and why the experiments and simulations are
13 important. Do you remember that?

14 A Can you say that again?

15 Q Do you remember discussing with your counsel the role
16 that you and others played at Google in running experiments?

17 A Yes.

18 Q And running simulations, correct?

19 A Yes.

20 Q And would you agree that Google runs those experiments
21 because they have confidence in the results of those
22 experiments?

23 A Assuming that the right people are looking at it.

24 Q Okay. And many people, such as yourself, with PhDs run
25 those experiments at Google, correct?

Redirect Examination - N. Jayaram

1 A Yes.

2 Q All right. Let's talk about one of those experiments.

3 MS. WOOD: If you can, pull back up again PTX
4 324.

5 BY MS. WOOD

6 Q This is the experiment you ran on pulling all Google
7 Ads' demand from AdX. Do you recall that?

8 A Yes.

9 Q And do you recall that your counsel asked you some
10 questions on friendly cross about how this represents more
11 than just open-web display? Do you recall that?

12 A Again, it depends on the interpretation of open web.

13 Q Okay. Because that's a term you don't understand?

14 A I have my own definition of open web.

15 Q Well, do you understand open-web display as display
16 that appear on websites that are not walled gardens?

17 A I explained that as websites are app content that are
18 free for users to access.

19 Q Okay. So if I said to you open-web display is content
20 displayed on websites that are not walled gardens, you
21 wouldn't understand what I meant by that?

22 A I would understand what you mean by that, but that does
23 not -- that's not a context in which I have used open web in
24 the past and not by interpretation of open web.

25 Q Okay. So in this experiment that is the subject of PTX

Redirect Examination - N. Jayaram

1 324, this was not run on AdMob; is that correct?

2 A No, this was not run on AdMob.

3 Q Okay. And do you know how prominently web video ads
4 were sold in January 2014?

5 A I know that there were app and video content on AdX,
6 but I don't know how prominent.

7 Q Okay. And then your counsel pointed you to the
8 statement at the bottom of page 1 that says a large number,
9 70 percent, go unmatched, which is interesting. Do you see
10 that?

11 A Yes.

12 Q And that's an indication of the fact that AdX itself
13 has unique supply, correct?

14 A I don't agree.

15 Q Okay. Now, there was some discussion about whether
16 Google Ads' advertisers actually asked for AWBid. Do you
17 recall that?

18 A Yes.

19 Q And you testified previously on your direct examination
20 that you knew, regardless of whether they asked for it or
21 not, that expanding Google Ads into third-party exchanges
22 would be in those advertisers' best interests, right?

23 A That's not exactly the words I used.

24 Q Okay. Well, the record will speak for itself in that
25 regard.

Redirect Examination - N. Jayaram

1 I want to turn now to PTX 132, which you also
2 spoke about with your counsel. And, again, in PTX 132, you
3 talked about many of the challenges of implementing AWBid
4 over a course of three years and how the pipes had to be
5 built and configured. Do you recall all of that?

6 A Yes.

7 Q Okay. This a document from April 2013. You had been
8 at Google about five months at that point, right?

9 A Yes.

10 Q And in April 2013, when the document says, "GDN needs
11 to be cross-exchanged competitively. We will do it via
12 xBid's implementation," meaning DV360's implementation,
13 there's no reference that will take three years to do,
14 right?

15 A I explained why it took longer than that, because of
16 unforeseen difficulties.

17 Q And I listened carefully as you did that, and I want to
18 know -- because what I don't recall hearing in your
19 testimony, do you recall there was a big debate internally
20 at Google as to whether AWBid should happen at all?

21 A I was not part of those debates.

22 Q Okay. So you weren't part of those debates, so you
23 don't know whether those debates are, in fact, the reason
24 why it took two to three years to open up Google Ads to
25 other exchanges; is that fair?

Redirect Examination - N. Jayaram

1 A No.

2 Q You also indicated that one thing that took a long time
3 was to deal with latency and spam concerns. Do you recall
4 that?

5 A Yes.

6 Q And let me show you a document we will have marked for
7 identification as PTX 0199.

8 THE COURT: 199?

9 MS. WOOD: 199.

10 THE COURT: Any objection?

11 MS. RHEE: I don't have it in front of me,
12 Your Honor. I could get it.

13 Thank you.

14 No objection, Your Honor.

15 THE COURT: All right. It's in.

16 BY MS. WOOD

17 Q Do you see this is dated September 4, 2014, right?

18 A Yes.

19 Q And this is in the time period where there was a
20 discussion about opening up Google Ads to rival ad
21 exchanges?

22 A Yes.

23 Q Okay. I'd like you to turn to the page that ends in
24 Bates stamp 241. Can you read the title of that slide out
25 loud, please, sir?

Redirect Examination - N. Jayaram

1 A "Click Spam is at acceptable levels in most exchanges,
2 actions for outliers needs discussions."

3 Q So spam was at acceptable levels in most exchanges, but
4 there were outliers that needed discussion; is that right?

5 A Acceptable for that stage of AWBid.

6 Q Okay. And at that point, the spam on AdX, as indicated
7 on this chart, was 10.4 percent. Am I reading that
8 correctly?

9 A Yes.

10 Q Okay. And so that's compared to PubMatic with 17.9 and
11 OpenX with 14.8; is that right?

12 A Yes.

13 Q And if you turn to the previous page ending in Bates
14 240, do you see it's entitled, quote, "Inventory Quality
15 Meets AdX policy ratings and compares to AdSense Longtail"?
16 Do you see that?

17 A I see it.

18 Q And do you see the policy rating is six out of ten
19 versus seven out of ten for AdX; is that right?

20 A Yes.

21 Q And this was something that Google continued to pay
22 attention to, how other exchanges were doing on things like
23 spam and content, right?

24 A Yes. We continually enlist in this.

25 Q Let me show you another document. This one is marked

Redirect Examination - N. Jayaram

1 as PTX 835.

2 THE COURT: Any objection to 835?

3 MS. RHEE: No objection, Your Honor.

4 THE COURT: All right. It's in.

5 BY MS. WOOD

6 Q So this is a few years later in September of 2018.

7 It's another AWBid review, correct?

8 A Yes.

9 Q If you turn to the page ending in Bates stamp 867.

10 A Okay.

11 Q At the bottom of that page, there's a chart, and it
12 reads, quote, "Spam click rate comparable to AdX." Do you
13 see that?

14 A Yes.

15 Q Does that refresh your recollection that certainly by
16 September 2018, the spam click rate for rival exchanges for
17 AWBid was comparable to AdX?

18 A It does not refresh my recollection, but we had done a
19 ton of work on spam. So I can see why the click rate might
20 be comparable to AdX by 2018.

21 Q And do you see it says, "Contracts have clawback
22 provisions that we exercise monthly"? Do you see that?

23 A Yes.

24 Q And that's a reference to the concern you articulated
25 on cross-examination with your lawyers about how when

Redirect Examination - N. Jayaram

1 there's spam, there can be difficulties in billing, correct?

2 A Yes.

3 Q Now, you're also aware that in the ad tech ecosystem,
4 there are third-party vendors that offer spam protection,
5 correct?

6 A I am not very familiar with that.

7 Q Okay. So you're not aware one way or the other whether
8 advertisers can look to third-party vendors to get
9 additional protection on spam if that's something they're
10 concerned about?

11 A That's right.

12 Q Okay. You also talked with your counsel about Google
13 ad connector (phonetic). Do you recall that?

14 A Yes.

15 Q And is that another term for the Yavin product?

16 A Yes.

17 Q Okay. And the Yavin product, that was a way to access
18 walled garden display ads, correct?

19 A I looked at it as a way to access publisher inventory
20 even though they were running their own ad servers.

21 (Reporter clarification.)

22 BY MS. WOOD

23 Q Publisher inventory even though they were running their
24 own ad servers, is that what you said, sir?

25 A When they are running their own ad server.

Redirect Examination - N. Jayaram

1 Q Okay. And so when a publisher runs its own ad server,
2 this was a way for Google to be able to buy and sell display
3 ads on Google Ad connector or Yavin, correct?

4 A Can you repeat the question?

5 Q Google Ad connector offered a way to buy and sell
6 display ads in that circumstance where the publisher was a
7 walled garden that ran its own publisher ad server, correct?

8 A I mean, I think I already said I don't understand your
9 definition of walled garden.

10 Q Okay. Let's talk now about Poirot. You indicated that
11 in 2016 was the time period when people at Google started
12 working on Poirot. Is that right?

13 A Yes.

14 Q Okay. 2016 was also the time when people at Google
15 were very focused on header bidding, correct?

16 A I don't recall exactly when those conversations
17 happened.

18 Q Okay. You recall being involved -- in fact, we went
19 through these documents on your direct exam -- being heavily
20 involved in a review of Google's response to header bidding
21 in 2016. Do you recall that?

22 A I don't agree with the characterization that I was
23 heavily involved.

24 Q Do you recall looking at documents with me on direct
25 exam that Google was focused on header bidding and its

Redirect Examination - N. Jayaram

1 response to header bidding throughout 2016?

2 A Yes.

3 Q Okay. And 2016 just coincidentally happened to be the
4 time when the work on Poirot started; is that your
5 testimony?

6 A Yes.

7 Q Okay. And Poirot, in fact, shifted revenue away from
8 third-party exchanges to AdX, correct?

9 A Yes.

10 Q Okay. So let's look at some of that shift.

11 MS. WOOD: If we can, pull up PTX 478,
12 please.

13 BY MS. WOOD

14 Q Oh, first of all, let me ask you to turn in PTX 478 to
15 the page ending in Bates stamp 435.

16 Do you remember discussing with your lawyer on
17 cross-examination that Poirot was intended to address
18 so-called dirty auctions? Do you remember that?

19 A Yes.

20 Q And you defined a dirty auction as an auction that was
21 called a second-price auction but was really running more
22 like a first-price auction. Do you remember that?

23 A Yes.

24 Q Isn't it true, sir, that AdX itself by that definition
25 was running a dirty auction?

Redirect Examination - N. Jayaram

1 A No.

2 Q If you look at the page ending in 435 -- do you know

3 Mr. Maurer, Tobias Maurer?

4 A Yes.

5 Q Who is he?

6 A He's a product manager.

7 Q For what?

8 A At that time, I think he was working on the buy-side.

9 Q Any product in particular?

10 A He worked on DV360 for a while and on also AdWords.

11 Q And this says, "Will we not adjust fixed bidding on AdX
12 as well in the case of RPO" -- RPO stands for reserve price
13 optimization, correct?

14 A Yes.

15 Q In the case of reserved price optimization being
16 enabled, this will add direct advertiser value as RPO will
17 tend towards charging 95 percent of the fixed bid." Do you
18 see that?

19 A I see it.

20 Q That is a reflection of the fact that AdX was running
21 an auction that had a result that was close to the result
22 you would get in a first-price auction, correct?

23 A This is not a fact.

24 Q Now, let's turn to the document your counsel showed
25 you. DTX 615 I believe it is. And if we can, turn to the

Redirect Examination - N. Jayaram

1 page that ends in Bates stamp 635. It had the colors on it,
2 the little chart in the bottom right-hand corner.

3 A Yes.

4 Q And you remember green and orange and red?

5 A Yes.

6 Q Okay. And so the green were indications of where
7 Poirot was not running; so Poirot was not decreasing bids by
8 DV360 buyers on AdX, correct?

9 A No, that's not correct.

10 Q AdX was not triggered by Poirot, correct?

11 A Poirot was running on all the exchanges, including AdX.

12 Q Okay. Listen to my question. Using Poirot on AdX, did
13 DV360 reduce bids into the AdX auction?

14 A No.

15 Q Okay. So that's why AdX is here in green, right?

16 A No.

17 Q Do you see the red that's -- what is the red line?
18 OpenX and PubMatic, do you see that?

19 A Yes.

20 Q And OpenX and PubMatic were large competitors of
21 Google's ad exchange business, correct?

22 A I don't know how big they were.

23 Q Okay. Do you know how big United was?

24 A No.

25 Q Do you know how big AppNexus was?

Redirect Examination - N. Jayaram

1 A I do not know the size of these exchanges.

2 Q So let's look up PTX 860, which your counsel also
3 showed you. And if you'll recall, I think with
4 Mr. Klein's -- or someone's assistance, you pulled up the
5 whole chart of results per exchange. Do you remember that?

6 A Yes.

7 Q And we looked how some exchanges, like OpenX for
8 example, had their revenue drop by 42 percent. Do you
9 remember that?

10 A I think that was a different -- oh, yeah. Yes, I see
11 it.

12 Q Do you remember that?

13 A Yes.

14 Q Okay. And some exchanges were helped to the tune of
15 1. percent or 2.2 percent or even RightMedia at
16 13.7 percent. Do you see that?

17 A Yes.

18 Q But you can't say as you sit here now whether those
19 exchanges that were helped by Poirot were significant
20 competitors of AdX or not; is that right?

21 A That's correct.

22 Q Now, you were also asked some questions about UPR. Do
23 you remember that?

24 A Yes.

25 Q Were you aware of how publishers responded to the

Redirect Examination - N. Jayaram

1 announcement of UPR?

2 A No.

3 Q Did you attend the meeting in spring 2019 where
4 publishers expressed to Google exactly how they felt about
5 UPR?

6 A No.

7 Q But you are aware that UPR shifted impressions to AdX,
8 correct?

9 A No, I can't say that for sure.

10 Q You can't say that for sure. Do you recall running
11 experiments or simulations in which it was demonstrated that
12 because of the introduction of Unified Pricing Rules, more
13 impressions shifted to AdX and away from third-party
14 exchanges?

15 A Not to my knowledge, no.

16 Q Okay. Let's pull up PTX 520. This is the document
17 that has your name on it that you disagree with several
18 portions of it. Do you remember that?

19 A Yes.

20 Q The other people that are listed as authoring this
21 document include Mr. Amini; is that right?

22 A Yes.

23 Q Is he your boss?

24 A Yes.

25 Q Okay. And Mr. Agarwal, he was a gTrade colleague with

Redirect Examination - N. Jayaram

1 you?

2 A Yes.

3 Q And Mr. Maurer, he was also another gTrade colleague
4 with you; is that right?

5 A Yes.

6 Q Now, do you recall looking at -- in PTX 588, there was
7 a discussion about an experiment that looked at just
8 stopping buying cross-exchange on DV360 altogether. Do you
9 remember that?

10 A I remember talking about it.

11 Q Okay. You remember talking about that with your
12 counsel just a few minutes ago, right?

13 A Yes.

14 Q Okay. And you made the point with your counsel that
15 that was just an experiment, that was a thought idea, we
16 never did it, right?

17 A Yes.

18 Q What you did instead at around the same time was to
19 reduce DV360's bidding on those third-party exchanges; isn't
20 that right?

21 A We launched Poirot to optimize for the advertiser.

22 Q And that had the effect of reducing bids on those
23 third-party exchanges, which you had previously experimented
24 with stopping altogether, correct?

25 A It only reduced spending on third-party exchanges that

Redirect Examination - N. Jayaram

1 were not running second-price auctions.

2 Q And do you remember talking about Trade Desk and their
3 practices of bid shading?

4 A Yes.

5 Q Are you aware of whether Trade Desk bids on a query by
6 query basis versus just across an entire exchange?

7 A I do not know.

8 Q Now, Poirot was a feature that DV360 customers had to
9 opt out of; is that right?

10 A Yes.

11 Q So it was a default setting that Poirot was enabled,
12 correct?

13 A Yes.

14 Q And what was the disclosure about Poirot so that they
15 could make an informed choice about whether to opt in or opt
16 out?

17 A I do not know the nature of disclosures to advertisers.

18 Q In fact, isn't it true that there was no disclosure
19 that Poirot operated at the exchange level instead of the
20 query level? Isn't that true?

21 A I do not know the nature of the disclosures to the
22 advertisers.

23 Q You were also shown PTX 791 just a few minutes ago at
24 the end of your counsel's exam. Do you remember that?

25 A Yes.

Redirect Examination - N. Jayaram

1 Q And if you turn to the page ending in Bates stamp
2 218 -- I don't think you went over this page. Well, first
3 of all, if you could, look at the front of the document.
4 What's the big heading above AWBid?

5 A Privileged and confidential.

6 Q And was there a request for legal advice in this
7 document?

8 A I do not know.

9 Q And then going to page 218, ending in Bates stamp 218,
10 do you see that?

11 A Yes.

12 Q And this is a time when AWBid was focused on
13 remarketing impressions. Do you see that? Do you see where
14 it says, "Why remarketing only"?

15 A I see something else at the top.

16 Q You see "What is AWBid," correct?

17 A Maybe I do need the binder. Thank you.

18 Q Are you looking at the same screen I am? Do you see
19 where it says "why remarketing only"? It's in yellow.

20 A Yes. I was referring currently launch remarketing
21 advertise here (phonetic).

22 Q "Currently launched for remarketing and icm verticals
23 only"?

24 A Yes.

25 Q No advertiser control; is that what you're referring

Redirect Examination - N. Jayaram

1 to?

2 A Yes.

3 Q Okay. And then do you see the words I'm referring to
4 that say "why remarketing only"?

5 A Yes.

6 Q And it answers that question, right?

7 A I see an answer listed.

8 Q Yeah, and the answer is, "Remarketing is where
9 AdWords" -- meaning Google Ads -- "faces the most
10 competitive pressure and most benefit from additional
11 reach." Do you see that?

12 A I see it.

13 Q It says, "Majority of remarketing advertisers are not
14 budget constrained and want more conversion volume." Do you
15 see that?

16 A Yes.

17 Q And then what does the second bullet point say?

18 A "Greatly reduces concerns about impact to publisher
19 business."

20 Q And the impact to the publisher business is a reference
21 to the impact to Google's sell-sides; isn't that true?

22 A I did not author this document. That sounds like -- I
23 would have to guess the intent of the author.

24 Q I want to turn to the page that ends in Bates stamp
25 239. And do you see, again, not only is the PowerPoint --

Redirect Examination - N. Jayaram

1 239. Do you see on this page not only is the PowerPoint
2 itself marked privileged and confidential, but this specific
3 page is also additionally marked privileged and
4 confidential? Is that right?

5 A I see it.

6 Q Do you see any request for legal advice here?

7 A I don't.

8 Q Okay. Well, what we do see is a discussion about
9 pricing, correct, about margins, right?

10 A Yes.

11 Q And do you recall getting an instruction as part of
12 communicate with care that whenever there's a discussion
13 about pricing or competitive issues, best to mark it
14 privileged and confidential?

15 A I do not.

16 Q Okay. So here there's a reference to 50 percent
17 margins. Do you see that?

18 A Yes.

19 Q And those 50 percent margins, are those the margins you
20 described as the 50 percent margins for contextual interest
21 ads?

22 A Yes.

23 Q Okay. And so this says -- there's a concern on the
24 left and then a mitigation on the right. Do you see that?
25 It's how the chart is structured.

Redirect Examination - N. Jayaram

1 A Yes.

2 Q Okay. And so the concern is "Third parties and
3 middlemen will benefit." Do you see that?

4 A Yes.

5 Q And the mitigation of that concern is, "At 50% margins
6 (higher than YouTube) there isn't much room for middlemen to
7 take a cut." Do you see that?

8 A I see it.

9 Q And then a few lines down, the concern that's listed
10 is, "We could make more money on AdX," and the mitigation to
11 that concern is, "At 50%, if publisher moves to AdX, Google
12 makes less net revenue." Do you see that?

13 A I do.

14 Q And on the left-hand side at the bottom, it says,
15 "There will be substantial negative impact to sell-side."
16 That's a reference to sell-side business, correct?

17 A I did not author this document. That seems like a
18 reasonable inference, though.

19 Q Okay. And the mitigation to that concern is that,
20 "Despite worries when first launching AWBid on RMKT 3+ years
21 ago, there doesn't seem to have noticeable impact to our
22 sell-side." Do you see that?

23 A Yes.

24 MS. WOOD: I'll pass the witness.

25 THE COURT: Any recross?

Recross-Examination - N. Jayaram

1 MS. RHEE: Briefly, Your Honor.

2 RECROSS-EXAMINATION

3 BY MS. RHEE

4 Q Okay. Mr. Jayaram, you were shown on this redirect PTX
5 199.

6 MS. RHEE: If we could, please pull it up.

7 BY MS. RHEE

8 Q And first of all, you see the title here. Who is the
9 author?

10 A Tobias Maurer.

11 Q Okay. Not you. And then what's the date?

12 A 9-4-2014.

13 Q So is that before or after AWBid launches?

14 A This is prior to the launch.

15 Q Okay. So prior to the launch, is that -- I just want
16 to make sure we're all hearing you.

17 A Correct.

18 Q So now let's go to the Bates stamp ending in 241, which
19 is what Ms. Wood showed you on her recross. You see that,
20 right?

21 A Yes.

22 Q Okay. And now this is before launch. So I want to
23 direct your attention to the statement on the left that
24 says, "Currently not getting spam signals on impression
25 basis but will with the launch." Do you see that?

Recross-Examination - N. Jayaram

1 A Yes.

2 Q And is that consistent with your recollection of the
3 events in 2014 before launch?

4 A Yes.

5 Q Okay. And then similarly, underneath there, it says,
6 "Casala Media's spam due to ad verification service, can be
7 addressed with special log handling on our end." Do you see
8 that?

9 A I see it.

10 Q Okay. And then finally, in terms of next steps, it
11 says here, "More experimentation needed" -- I think there's
12 a missing "to -- "to understand the nature of spam, then
13 work with offenders to address spam or terminate buying."
14 Do you see that?

15 A Yes.

16 Q And is that consistent with your recollection of the
17 events prior to launch?

18 A Yes.

19 Q Okay. Now, here on the right-hand side, you see that
20 PubMatic has insufficient traffic. Do you see that?

21 A I see it.

22 Q And the same with the Yieldlab; is that right?

23 A That's right.

24 Q Okay. And what is insufficient traffic mean?

25 A It meant there wasn't enough clicks to make an offline

Recross-Examination - N. Jayaram

1 determination of the spam rates.

2 Q And, again, is that consistent with insufficient data
3 prior to launch or going live?

4 A Correct.

5 Q And the documents that we walked through about AWBid
6 latency, AWBid spam, etc., are those documents that occurred
7 after the launch, after it went live?

8 A Yes.

9 Q Now, similarly, you were shown on Ms. Wood's recross
10 PTX 478.

11 MS. RHEE: So if we could, pull that up.

12 BY MS. RHEE

13 Q And in marks she directed your attention to -- what is
14 admittedly very hard to read -- it is Bates stamp ending in
15 435.

16 MS. RHEE: And if we could, blow that up
17 super large because we want to actually be able to read
18 it.

19 BY MS. RHEE

20 Q Okay. You see those comments to this slide deck,
21 Mr. Jayaram?

22 A The two comments, yes, I see it.

23 Q Okay. And the first one Ms. Wood walked you through,
24 is that written by you as best as you can tell?

25 A No.

Recross-Examination - N. Jayaram

1 Q Okay. And whoever this person asks, "Will we not
2 adjust fix bidding on AdX as well," it's in the form of a
3 question, yes?

4 A Yes.

5 Q And what is the answer to the question? And you can
6 see there is a responsive comment right below.

7 A We have Poirot other than running on all the exchanges,
8 including AdX. So if AdX went to actually deviate from
9 second-pricing, Poirot would have detected it and lowered
10 the bid. But Poirot did not lower the bid because AdX
11 continued to run a second-price auction until 2019.

12 Q So I just want to understand your testimony. Is Poirot
13 essentially the algorithm that's being run across every
14 single exchange?

15 A Yes.

16 Q And does that include AdX?

17 A Yes.

18 Q And does the algorithm know or care how big or small
19 that exchange is?

20 A No.

21 Q Does the algorithm know or care what the market share
22 of any given exchange is?

23 A No.

24 Q Did you program that algorithms to care or to know what
25 the size of the exchanges are?

Recross-Examination - N. Jayaram

1 A No.

2 Q And so the reason why there isn't an adjustment to the
3 bidding on AdX is because that's what the algorithm told it?

4 A That's correct.

5 Q And then, finally, you were shown on direct examination
6 what I believe to be PTX 835 and, in particular, the slide
7 ending 876. Do you see that?

8 A Yes.

9 Q Okay. And then if you just keep flipping to the next
10 page, you see there's a redacted box for privilege?

11 A Yes.

12 Q And then you flip to the next page after that, and you
13 see more redacted boxes?

14 A Yes.

15 Q Now, Mr. Jayaram, do you have anything to do with what
16 remains redacted, what is actually withheld on the basis of
17 privilege versus what's produced?

18 A No.

19 Q Again, are you an engineer?

20 A Yes.

21 MS. RHEE: Okay. No further questions.

22 (Ms. Wood stands.)

23 THE COURT: No. We're done.

24 Are you moving exhibits in?

25 MS. WOOD: No, but I did have one question

1 directly raised for the first time in that last --

2 THE COURT: No, we don't do it that way.

3 MS. WOOD: Okay.

4 THE COURT: Does anybody anticipate calling
5 this witness again during the course of the trial?

6 MS. WOOD: No, Your Honor.

7 THE COURT: All right. What about for the
8 defense?

9 MS. RHEE: I think we're going to reserve,
10 Your Honor, just in case something comes up in the
11 remainder of the government's case.

12 MS. WOOD: Then we'll do the same, Your
13 Honor.

14 THE COURT: All right. Then that means that
15 you cannot watch the proceedings. You're free to go
16 now. Certainly, you won't be called back for a couple
17 of days at least.

18 Please do not discuss your testimony with any
19 witness who has not yet testified.

20 THE WITNESS: Okay, Your Honor.

21 THE COURT: All right. The next witness.

22 Are we going back to the deposition from
23 yesterday, or are we going to another witness?

24 MS. WOOD: We have more live witnesses today,
25 Your Honor.

Direct Examination - T. Cadogan

1 THE COURT: All right.

2 MR. VERNON: Good afternoon, Your Honor.

3 Jeff Vernon for the United States. The plaintiffs call
4 Tim Cadogan from OpenX.

5 THE COURT: All right. Go ahead.

6 TIM CADOGAN, PLAINTIFFS' WITNESS, SWORN

7 DIRECT EXAMINATION

8 BY MR. VERNON

9 Q Good afternoon, Mr. Cadogan. Can you explain your role
10 at OpenX?

11 A Yes. I was CEO from 2008 to 2020.

12 Q And do you have any role at OpenX today?

13 A Yes, I remain on the board. I serve as the chairman of
14 the board.

15 Q And what hand involvement, if any, did you have in the
16 founding of OpenX?

17 A So OpenX already existed in the UK, but I and my
18 effective cofounder Jason Fairchild brought to it the U.S.,
19 set up the company here, and grew the company from zero in
20 revenue.

21 Q And setting aside your board role at OpenX, what other
22 work do you do today?

23 A I am currently the CEO of GoFundMe, which I have been
24 since March 2020.

25 Q And can you briefly explain what OpenX is?

Direct Examination - T. Cadogan

1 A Yes. In brief, OpenX was a business that would help
2 publishers maximize their ad revenue primarily through an ad
3 server and an ad exchange business.

4 Q What was OpenX's first product?

5 A Our first two products really that came out at a
6 similar time was an ad serving product and an ad exchange.
7 The ad exchange we launched in September 2008 if I remember
8 correctly.

9 THE COURT: I'm sorry. You're dropping your
10 voice. You have to keep it up so we can hear you.

11 THE WITNESS: I'm sorry. I will try and lean
12 down. I heard I was going to get a back ache here. So
13 I'll go for it.

14 THE COURT: Well, we can get you a lapel mic
15 if that would make it better.

16 THE WITNESS: Oh, thank you very much. Oh,
17 that would be great. How's that?

18 THE COURT: Oh, that's fantastic.

19 THE WITNESS: Ready to go.

20 MS. RHEE: Your Honor, why did we wait this
21 long?

22 THE WITNESS: Yeah. Thank you, ma'am, Your
23 Honor. Thank you. Sorry.

24 BY MR. VERNON

25 Q During what time period did OpenX have an ad server?

Direct Examination - T. Cadogan

1 A From the beginning of the business in 2008 until
2 somewhere around 2017, 2018, when we finally shut it down.

3 Q Who was the main competitor for OpenX's publisher ad
4 server?

5 A It was the Google product DFP.

6 Q And why do you say the DFP, Google's product, was the
7 main competitor for OpenX's ad server?

8 A Well, it was -- it had the largest market share. So it
9 had most publishers. And so if we wanted to win business
10 and to grow the ad serving part of our company, we would
11 need to win clients from DFP. It was the incumbent even
12 back in 2008.

13 Q Did OpenX ever try to win publishers away from DFP?

14 A Yes, absolutely we did frequently.

15 Q About how many times did OpenX try to convince
16 publishers to switch from DFP on the one hand to OpenX's ad
17 server on the other hand?

18 A Oh, hundreds.

19 Q And how many publishers actually did switch from DFP to
20 OpenX?

21 A I'm afraid relatively few, maybe 10 or 15.

22 Q And of those 10 or 15 that switched, how many of them
23 were large publishers?

24 A Very few.

25 Q Did OpenX ever lose publishers to DFP?

Direct Examination - T. Cadogan

1 A Yes, we did. Typically, most larger publishers were
2 already working with DFP. But on occasion, when we would
3 have a client who would grow to become bigger, we could lose
4 those. An example might be a company like Fox Media, which
5 became bigger over time.

6 Q About how many publishers switched from OpenX to DFP?

7 A Dozens. I don't remember specifically. It might have
8 been as many as a hundred or more.

9 Q From your experience, what was the main reason OpenX
10 lost when it was competing with DFP?

11 A The single biggest reason was that -- well, DFP was a
12 good product. It came attached with the Google AdX
13 exchange, which was a very compelling source of revenue for
14 publishers. And so our ad server wasn't able to connect to
15 AdX. And so it was very difficult to persuade a publisher
16 to go with us and forgo access to AdX as a revenue source.

17 Q In terms of features, how did OpenX's ad server compare
18 to DFP?

19 A We stacked up reasonably well. There were a couple of
20 areas we were probably not quite so good. But overall, the
21 product was robust. But the biggest disadvantage was the
22 inaccessibility of the ad exchange from Google.

23 Q And how did OpenX's ad server prices compare to DFP's
24 prices?

25 A We competed reasonably well. DFP would on occasion

Direct Examination - T. Cadogan

1 reduce prices, and we would often try to follow them. So
2 I'd say pricing was an area we could compete reasonably
3 effectively.

4 Q And what advantages did OpenX's ad server have compared
5 to DFP?

6 A The primary areas we would focus on from a competitive
7 advantage point of view were flexibility, choice, i.e., the
8 ability to choose the monetization sources, and
9 independence, the fact that we were focused solely on this
10 part of the business and were not in adjacent businesses was
11 quite valuable to some publishers.

12 Q And so when you were mentioning the advantages of
13 OpenX's ad server over DFP, you mentioned flexibility. Can
14 you explain what you meant by that?

15 A Yes. I mean, the ability to -- for example, we had an
16 ad exchange as well, but the publisher didn't have to use
17 our ad exchange. They could choose to manage demand in
18 their ad server in the way that worked best for their
19 business. So it gave them flexibility.

20 Q And you also mentioned independence. Can you explain
21 what you meant by that?

22 A Yes, I can. So for some publishers, Google, for
23 example, was actually competing for them -- with them in
24 their main business. So, for example, a travel company
25 might think of Google as a competitive business because it

Direct Examination - T. Cadogan

1 offered certain functions to consumers around the travel
2 segment. So they may consider them competitors as an
3 example.

4 Q When publishers used OpenX's publisher ad server, how
5 much access did those publishers have to AdX?

6 A Minimal. There was access in the form of what's called
7 an ad tag, which is the sort of traditional way that you
8 would access demand. But you didn't have any access on a
9 real-time basis to the AdX ad exchange, which is really what
10 publishers wanted because they wanted to real-time
11 competition for their inventory.

12 Q And so what's the difference between real-time access
13 to AdX and the AdX tag?

14 A So the difference is with real-time or programmatic --
15 I'm not sure what terminology you've been using here. The
16 whole point of the industry is to be able to value an
17 impression, which is a user's attention at a moment in time,
18 to be able to value that in real-time. That's the point of
19 the industry.

20 When you use an ad tag, that's just a proxy. It's
21 a historic price. It's a historic average price. So you're
22 not -- the price signal, if you like, that you're receiving
23 is of a completely different class. One is real-time and
24 contemporary. The other is historic average. So they're
25 two very different animals.

Direct Examination - T. Cadogan

1 Q How effective were the ad tags that you mentioned
2 compared to real-time access as a means of accessing AdX?

3 A They were much less effective and much less compelling,
4 and also, if I remember correctly, the AdX ad tag didn't
5 have what's called a pause-back which means that if --

6 (Reporter clarification.)

7 A A pause-back, a pause-back. I'm sorry. There's so
8 much jargon in this industry. I've got to say I'm happy to
9 have left there because I can speak English in my new
10 business.

11 But anyway, so it meant that if they didn't win,
12 if they didn't have an ad, what a pause-back means is it
13 then can go on to somebody else. But in this case, if the
14 ad tag didn't win, it didn't have a pause-back, so the
15 impression would go unsold.

16 Again, that's my recollection. It was a long time
17 ago, but I remember that.

18 Q So I think you said that publishers using OpenX's ad
19 server had no real-time access to AdX; is that right?

20 A Yes, that's correct.

21 Q How did that affect OpenX's ability to compete with
22 DFP?

23 A Well, very significantly. Because AdX was -- and I
24 believe it still is -- the most powerful source of real-time
25 bidding in real-time demand in the industry. So for a

Direct Examination - T. Cadogan

1 publisher, it's a very hard thing to forgo that. So our
2 ability in our ad serving business to win publishers was
3 really constrained because a publisher would have to say,
4 you know, I'm going to work with you, which means I'm not
5 going to be able to work with Google AdX, which is very
6 valuable. It's a hard decision for a publisher to make.

7 Q How easy or difficult was it for OpenX to compete with
8 DFP in the publisher ad server business?

9 A It was very, very difficult to the point where we
10 ultimately decided to shut the business. We had started --
11 it got harder and harder. Then ultimately we shut down that
12 part of our business.

13 Q Did OpenX ever ask Google to provide real-time bids to
14 publishers using OpenX's ad server?

15 A We did reach out about accessing demand from AdX.

16 Q And did OpenX ever obtain the ability to provide
17 real-time bids to publishers from AdX, to publishers that
18 were using OpenX's ad server?

19 A Unfortunately, no, we didn't manage to get access to
20 that demand, the real-time demand.

21 Q Let me ask you a question about how this might work,
22 and I will focus your attention on the time period after
23 header bidding became prevalent. I think you mentioned
24 before that OpenX also had an exchange. Is that right?

25 A Yes, that's correct.

Direct Examination - T. Cadogan

1 Q You can take a sip of water.

2 A Thank you.

3 Q Did OpenX's exchange provide real-time bids to
4 publishers that were using ad servers other than OpenX's ad
5 server?

6 A Sorry. Just say that again. Sorry. Will you repeat
7 the question? I won't repeat question.

8 Q Did OpenX's exchange provide real-time bids to
9 publishers using ad servers other than the OpenX ad server?

10 A You premised the question with after header bidding;
11 didn't you?

12 Q Yes.

13 A Yes, we did. Well, I'll stop there.

14 Q And so what system did OpenX provide those real-time
15 bids.

16 A So header bidding was a system that we and some of our
17 competitors -- independent competitors came up with of
18 passing a bid into the header, which is the top of the
19 browser that the publisher gives the user, as a way to put
20 real-time demand -- give that to the publisher and then have
21 it flow into the ad server that they were running. It is a
22 rather convoluted process because we weren't able to work
23 directly with Google. So we came up with a creative way of
24 feeding demand in that ultimately could then be fed into DFP
25 by the publisher.

Direct Examination - T. Cadogan

1 Q And which entity actually sets up this system called
2 header bidding in which the bid is sent to the header and
3 the browser?

4 A The publisher would configure all of these components
5 in order to allow this, at that time, new system to run.

6 Q And once header bidding was set up, how difficult was
7 it for OpenX to provide real-time bids to the header bidding
8 system that was set up by the publisher?

9 A It was automatic. It was beyond easy. Once set up --
10 that's what we would design to do. We would do that
11 programmatically, i.e., automatically.

12 Q How long would it take?

13 A A few hundred milliseconds, the response time of
14 standard real-time bidding protocol.

15 Q So I think you mentioned before OpenX does not have an
16 ad server today.

17 A Yes, that's correct, we don't.

18 Q What is the main reason why OpenX exited the ad server
19 market?

20 A We were unable to compete effectively with DFP, and it
21 was no longer economic for us to attempt to continue to do
22 that.

23 Q And what was the main reason why you were no longer
24 able to effectively compete with DFP?

25 A I mean, DFP was so powerful because DFP was also linked

Direct Examination - T. Cadogan

1 to AdX, which was linked to -- which is the primary -- by
2 far the largest ad exchange, which is linked to DV360, the
3 larger buying system, which was then linked to Google Ads,
4 which is the biggest pool of advertising on the planet. I'm
5 not exaggerating, and that was not possible for us to
6 complete with for all the reasons that we've talked about a
7 little earlier.

8 Q And why do you say the main reason that it was
9 difficult for OpenX to compete with DFP -- were the limits
10 on OpenX's access to AdX rather than the pricing or features
11 differences that discussed before?

12 A So a publisher's main business is advertising. That's
13 how they generate their revenue. And so to work with the
14 OpenX ad server would require them saying no to by far the
15 largest source of advertising revenue that was available to
16 them, which was the Google offering. And that was not
17 accessible to them if they used the OpenX ad server. And so
18 that's a choice almost no publisher could make because they
19 couldn't go without that large source of revenue.

20 Q Now let's talk a little more about OpenX's exchange. I
21 think you might have mentioned this before, but roughly,
22 when did OpenX create its exchange?

23 A We launched the exchange in September 2008 in its first
24 version.

25 Q How easy or difficult was it to build an exchange?

Direct Examination - T. Cadogan

1 A It was very difficult. We raised about \$75 million as
2 a company, and we invested the majority of that in engineers
3 and product people to build the exchange and in sales and
4 business development people to go to market with that
5 exchange. It was our primary effort. And so yes, it was
6 difficult, and it was technically new. Real-time bidding
7 was brand new. It was a new innovation. So it required a
8 lot of time and effort and investment.

9 Q Let's talk about which companies OpenX's exchange
10 competes with. Who are the main competitors for OpenX's
11 exchange?

12 A Can I just clarify who are or who were?

13 Q Who are.

14 A Who are. So I think it's actually still the same
15 companies that were the main competitors while I was there,
16 which was Google, AdX, Rubicon Project, which now has a
17 different name -- it's called Magnite -- PubMatic, and then
18 somewhat later on Index came into the market. And we also
19 competed but also partnered with AppNexus. Those are
20 probably the main players.

21 Q And when you give testimony about who OpenX's main
22 competitors are, what are you basing that off of?

23 A So these were the companies that -- when we were going
24 to pitch a publisher and try to win their business, these
25 are the folks that would compete -- be competing with us

Direct Examination - T. Cadogan

1 typically.

2 Q Did you view social media, like Facebook, as one of the
3 main competitors for OpenX?

4 A No.

5 Q Why not?

6 A So social media was like a different planet. Those
7 companies -- those large platforms -- say Facebook is the
8 biggest. It runs its own advertising system. It's
9 inaccessible to us. We had no viable way to access any of
10 their inventory. Advertisers run in their own-and-operated
11 system. They run through a separate set of agencies even.
12 So it's very much a different part of the advertising
13 universe.

14 Q Let me break it down side by side starting with the
15 publisher's side. When OpenX was competing to win the
16 business of publishers, was OpenX competing with Facebook?

17 A No.

18 Q And why do you say that?

19 A Because we weren't. I mean, we didn't run into them.
20 There was a -- they had something called, I think, the
21 Facebook ad network for maybe the first few years. I think
22 they shut that down around 2016. But generally, that was an
23 ad network offering. We were competing with the companies
24 that I've outlined. Those are the companies -- you know,
25 each one of us was trying to get access to publishers, get

Direct Examination - T. Cadogan

1 access to their inventories. So no, we didn't run into
2 them.

3 Q And switching to the advertiser's side, when OpenX was
4 competing for advertisers, was Facebook one of OpenX's main
5 competitors?

6 A No, it wasn't.

7 Q And why do you say that?

8 A Similar to my answer for publishers, it just -- they
9 just weren't. They were playing a totally different game.
10 We were not involved in or engaged with the -- let's just
11 back up a moment. The main companies that we were engaging
12 with on the demand side were DSPs, demand-side platforms.
13 They were all built to bid on real-time exchanges like ours,
14 and they didn't participate in Facebook at all. And I
15 believe they still don't. So the folks that we were talking
16 to on the buy-side of the market had no overlap with the
17 players that were buying into Facebook.

18 Q At some level, OpenX does compete with Facebook for
19 advertiser dollars as part of a broader digital system; is
20 that fair?

21 A Yes, that's fair. You know, the hundred thousand foot
22 level, at the end of the day, advertising is advertising.
23 It's designed to get people to buy things. So ultimately,
24 yes, that's true.

25 Q And why do you say that OpenX's main competitors for

Direct Examination - T. Cadogan

1 advertiser dollars are the other exchanges even though at
2 some high-level, they're in some competition with Facebook
3 for advertiser dollars?

4 A Sure. Because as with many industries, at a practical
5 operating level, the funds, the money that moves into
6 Facebook, is handled and channeled and even measured in
7 quite different ways. Whereas the money that was moving
8 into open-web advertising was handled in a different way.

9 Also, the objectives were different. So for
10 example, if you want to be on premium, well-recognized new
11 sites -- say the *New York Times* or *The Washington Post*, then
12 you need to go through open-web advertising, programmatic
13 advertising to be present there. So it's a different --
14 it's a different operating approach. It's a different set
15 of goals. They are different audiences with different
16 contexts from those who are, say, looking at their Facebook
17 news feed, which is a very different environment.

18 Q OpenX also built a product called people-based
19 marketing?

20 A We did. Towards the tail-end of my tenure, we had
21 started to try and move into more of a user data driven side
22 of the business. That's right.

23 Q Can you briefly explain what that product was designed
24 to do?

25 A Yes. So we had observed that on the social media -- in

Direct Examination - T. Cadogan

1 fact, any of the large owned and operated properties --
2 Facebook, also Google, and some others -- it was very
3 valuable to be able to target based on attributes around a
4 person. And we wanted to bring some of those user-targeting
5 capabilities over to the open-web environment we were
6 operating in to give our publishers the chance to increase
7 their revenue.

8 Q How successful was OpenX's people-based marketing
9 product in winning advertiser dollars away from social
10 media?

11 A Yeah. I wish I could say it was much more -- it was
12 modest at best.

13 Q Did you view networks, like Criteo, as one of OpenX's
14 main competitors?

15 A No. Criteo was a customer of ours and bought
16 significant amounts of inventory through the OpenX ad
17 exchange.

18 Q Did you view DSPs as a competitor to OpenX's exchange?

19 A No. No, we didn't. They were our principal buying
20 customer.

21 Q Did you view publisher ad servers as a competitor to
22 OpenX's exchange?

23 A No. No, we didn't.

24 Q And why is that?

25 A Because we understood -- particularly as we started to

Direct Examination - T. Cadogan

1 reduce our investment in our ad server, we understood that
2 publishers would use the ad server they saw most fit. We
3 wanted to be able to work with any ad serving setup that a
4 publisher had in order to get access to their inventory for
5 our ad exchange.

6 Q Did you view Taboola or Outbrain (phonetic) as
7 competitors to OpenX's ad server or ad exchange?

8 A No. No, we didn't view those as competitors.

9 Q And why?

10 A So they had a somewhat specialized business model where
11 they would create additional space at the bottom of a news
12 article and then populate that with other stories. And that
13 was quite different from our business, which was monetizing
14 the main chunks of ad space that a publisher had created on
15 their page, much like a newspaper creates ad space.

16 So if you visualize the page, we were competing to
17 maximize revenue in a different part of the page from what
18 Taboola and Outbrain (phonetic) were seeking to achieve.

19 Q And take rates are kind of like the price that
20 exchanges charge; is that fair?

21 A Yes, that's fair.

22 Q When OpenX is setting its take rates, what competitors
23 matter the most?

24 A Principally, our main exchange competitors. So Google
25 AdX, Rubicon, PubMatic, Index, those are the main folks.

Direct Examination - T. Cadogan

1 Q Did competition from social affect OpenX's take rates?

2 A No.

3 Q Let me ask one other question about how OpenX's
4 exchange operated. Prior to the time that you transitioned
5 into your board role, what format of auction did OpenX's
6 exchange run?

7 A Do you mean -- yeah. So we ran actually a dual format.
8 So we ran a first price and a second price, and we provided
9 both of those to the DSPs so that the DSP could bid in the
10 format that worked best for them.

11 Q Did OpenX try to hide the fact that it ran this type of
12 auction where it was to some extent first price and to some
13 extent second price?

14 A No. No. We issued a press release when we started
15 doing it. And then when you send a bid request in the
16 fields were first price, second price, and the DSP could
17 respond with the format of auction that they wanted.

18 Q Can you explain what you meant when you were referring
19 to sending information in the field to DSPs?

20 A So every time you have an auction, you have a thing
21 called a bid request, which says, hey, Mr. DSP, I've got a
22 thing that you may want to buy. It contains some
23 information about that ad impression. And included in the
24 series of fields that go over is, hey, you can respond
25 either with a first-price bid -- if you do, let us know

Direct Examination - T. Cadogan

1 you're responding and want to compete in the first-price or
2 in a second-price format.

3 Q Let's turn to OpenX's competition with AdX in the
4 exchange business. What was it like competing with AdX?

5 A Super difficult, like --

6 Q Why was it super difficult to compete with AdX?

7 A How long have you got? Okay. Sorry.

8 First, AdX -- so two sides, supply side and demand
9 side. On the supply side, AdX by virtue of being tied with
10 DFP meant that they had a massive running start in terms of
11 access to by far the largest amount of large and midsize
12 publishers. So that's a big advantage right there.

13 Then on the demand side, the access to Google Ads,
14 which then and still now is by far the largest pool of
15 advertising dollars on the web or in the world actually
16 digitally or otherwise, that's very advantageous. So that
17 was very hard to compete with.

18 Q I think the first thing you mentioned was that AdX
19 because of DFP had a massive running start. Can you explain
20 what you meant by that?

21 A I can. DFP was the market leading in terms of market
22 share ad server for publishers. So it already had -- it was
23 the revenue system for most larger, midsize publishers
24 already. So it already very deeply embedded. And then once
25 you attached exchange, which was connected to Google Ads --

Direct Examination - T. Cadogan

1 and that exchange is tied so you can't get to the exchange
2 unless you use DFP. That's sort of a very -- that's a very,
3 you know, powerful combination for any of the independents,
4 such as ourselves, to try and compete with.

5 Q I think the other thing you mentioned was that on the
6 demand side, AdX had access to Google Ads. Can you explain
7 what you meant by that?

8 A Yeah. I mean, you know, Google Ads is -- I mentioned
9 is a very large pool of advertising. Not all of it
10 necessarily flowed into programmatic, but through
11 Google's -- the fact that it's the same company, the ability
12 to flow Google Ads into AdX means that the access to that
13 pool of demand is much more significant than anything that
14 we could get.

15 Q How much access did OpenX have to Google Ads?

16 A We got some access starting in around 2013 to a small
17 subset of that demand, which we believe was mainly focused
18 on what is called a remarketing demand. So we got a sliver
19 of the demand.

20 Q And how did the fact that OpenX had only a sliver of
21 access to Google Ads affect OpenX's ability to compete with
22 AdX?

23 A It made our job a lot harder.

24 Q And why is that?

25 A Because we're competing against someone who has a lot

Direct Examination - T. Cadogan

1 more scale in terms of the ad dollars that are sitting
2 behind that ad exchange. I should also add -- this is an
3 inference on my part, but when you have a connection between
4 a company, you're also able to flow data in ways that can be
5 very --

6 MR. JUSTUS: Objection, Your Honor.

7 THE COURT: Sustained.

8 THE WITNESS: Fair enough.

9 THE COURT: I'm glad you agree.

10 MR. VERNON: It makes it harder for me to
11 argue with that.

12 BY MR. VERNON

13 Q Let's fast-forward slightly. Let me ask you about the
14 2018 to 2019 time period.

15 A Sorry. 2018 to 2019?

16 Q Correct.

17 A Okay.

18 Q How successful had OpenX's exchange been prior to about
19 2018?

20 A So as a couple of phases, we had made progress but
21 struggled because of these issues with access to publishers.
22 And then we had a bit of a breakthrough because we were one
23 of the early companies to develop header bidding. Header
24 bidding basically sort of cracked the code a little bit by
25 finding a way that publishers could control to get access to

Direct Examination - T. Cadogan

1 our ad exchange. So it was in around 2014, sort of 2015,
2 and publishers loved this because it drove more revenue for
3 them. And so our exchange started to grow quite
4 significantly in this period on the back of the success of
5 header bidding.

6 Q In 2018, which DSP was the largest buyer on OpenX?

7 A The largest DSP was Google's DSP, which was called
8 DV360 at that time, I think. It changed names a few times.

9 Q Did DV360's buying on OpenX change in 2018?

10 A Yes, it did. It started to soften up in the summer,
11 and then as we headed into the sort of Q3 period, which is
12 the peak season for all advertising business, September,
13 October, and then November. It dropped very, very
14 significantly. I think by about 14 percent.

15 Q How did that drop in spending from DV360 affect OpenX?

16 A It damaged us very severely. We ultimately, as a
17 result of DV360 reducing spend that much -- plus some other
18 factors, but primarily that factor we had to reduce our
19 company's staff by about 45 percent. We had to cut costs
20 very aggressively. So we had to reduce about 200 people
21 from the company over a couple of different layoffs, which
22 was obviously a very difficult thing.

23 Q And I think you mentioned this, but were there any
24 other reasons other than the decline in spending from DV360
25 why OpenX had to lay off employees?

Direct Examination - T. Cadogan

1 A Yes. It wasn't the only reason. I said it was the
2 biggest. We saw some spending weakness from a couple of
3 other DSPs in that period. I don't recall specifically.
4 There were a couple of other factors that weren't as big,
5 but that was -- the biggest thing was DSP spending
6 reductions, and by far the biggest of those was the
7 reduction, which was really quite sudden from DV360, which
8 was surprising because they had spent several \$100 million
9 with us over the preceding years. And we had a good
10 relationship. So it happened pretty quickly.

11 Q How did laying off employees at this time affect
12 OpenX's ability to compete in later years?

13 A Well, it hurt. I mean, there are probably two really
14 significant factors. One is that we had fewer people, and
15 when we had fewer people, we were less able to build product
16 and to compete in terms of product technology innovation?
17 And we also had fewer people to go to market. So the two
18 basic functions of a technology company. So that hurt our
19 ability to compete.

20 And then the second big reason is reputational,
21 which is, you know, everyone knew that we had to fire a big
22 chunk of our workforce. So that hurt our reputation, our
23 credibility, our ability to win new clients that would sort
24 of wonder are you guys going to be around. So that
25 compounded by the first challenge that we faced.

Direct Examination - T. Cadogan

1 Q How does OpenX's revenue today compare to its revenue
2 just before DV360 reduced its buying on OpenX?

3 A It's still lower than where it was then.

4 Q Did you ever ask Google why DV360 reduced its spending?

5 A Yes, we did. We did, and we were never -- we never got
6 really anything of an answer. We happen to be engaging with
7 GCP, which was the cloud computing business of Google at
8 that time. We were asking -- we got so little answer, we
9 were asking for their help. We just -- we just didn't get
10 any information really.

11 Q Did you eventually later learn more about why DV360
12 reduced its spending?

13 A I did. Actually, it was many years later. It was
14 actually when --

15 Q How did you react when you learned more?

16 A Actually, I found out from our OpenX GC, who called me
17 to let me know.

18 MR. JUSTUS: Objection, Your Honor. Hearsay.

19 THE COURT: I am going to sustain the
20 objection. It's also really not relevant what the
21 effect was on the witness.

22 BY MR. VERNON

23 Q Who was the biggest buyer on OpenX's exchange?

24 A Google.

25 Q Who was the biggest competitor for OpenX's exchange?

Cross-Examination - T. Cadogan

1 A Google.

2 Q What was it like competing against one company that is
3 both your biggest buyer and your biggest competitor?

4 MR. JUSTUS: Objection, Your Honor.
5 Relevance.

6 MR. VERNON: Competition is a big part of
7 this case.

8 THE COURT: More than that, this has been
9 gone over more than enough. Move on to something else.

10 MR. VERNON: Actually, Your Honor, I pass the
11 witness.

12 THE COURT: That's the last question. All
13 right. Cross-examination?

14 MR. JUSTUS: Yes, Your Honor. Just one
15 second.

16 CROSS-EXAMINATION

17 BY MR. JUSTUS

18 Q So we are going to have to go through this a little bit
19 slow at some points because there's a lot of sealing
20 requested in OpenX documents. We are going to have to go
21 back and forth on when something is public and you can talk
22 about it. When something is sealed, you might have to point
23 to it and agree or not agree. We'll work through it
24 together. When I say something is sealed, that means you
25 need to be careful about what you say in open court.

Cross-Examination - T. Cadogan

1 A (Nods head.)

2 THE COURT: Go ahead.

3 BY MR. JUSTUS

4 Q Okay. So, Mr. Cadogan, I think you just said that in
5 2018 OpenX experienced a significant drop in revenue; is
6 that right?

7 A That's correct.

8 Q And I think you said that the biggest leader of that
9 drop in revenue was Google's DV360. That was your sworn
10 testimony?

11 A Yes. That was.

12 Q All right. Well, let's look at a document together,
13 Mr. Cadogan. If you will go to Tab 9 in your binder.

14 MR. JUSTUS: I am not seeking to admit this,
15 Your Honor. This is purely as impeachment.

16 THE COURT: I understand.

17 BY MR. JUSTUS

18 Q So, Mr. Cadogan, as you flip there -- and this is not
19 under seal -- this is the presentation for an OpenX board
20 meeting. Do you see that?

21 A I do, yes.

22 Q Okay. Let's go to slide 14.

23 So this is the September 2018 board meeting, and
24 this slide 14 is an analysis of the drop in OpenX revenue;
25 is that right?

Cross-Examination - T. Cadogan

1 A That is correct. I would note --

2 Q I'm sorry. There's actually not a question pending to
3 you. So let me ask you another question.

4 Do you see where it says demand decline,
5 \$8 million drive by a DPM -- and that's DV360, right?

6 A Yes, that is.

7 Q And The Trade Desk softness in Yahoo SPO efforts. Do
8 you see that?

9 A I do.

10 Q And then it has a number for the revenue decline from
11 DBM or DV360. Do you see that?

12 A Yes.

13 Q What is it?

14 A \$3 million.

15 Q All right. All right. Then what is the revenue
16 decline for The Trade Desk income 2018?

17 A It's \$3 million.

18 Q Okay. Thank you.

19 A And that's for the summer, not for Q4.

20 Q All right. Let's look at -- that's for the summer, not
21 for Q4. That's the sworn testimony now?

22 A It's a September document.

23 Q Okay. Let's look at -- let's flip to another document.
24 Let's go to Tab 10 in your binder. Are you there?

25 So this is DTX 0843.

Cross-Examination - T. Cadogan

1 MR. JUSTUS: And we will seek to enter this
2 into evidence, Your Honor.

3 THE COURT: Well, this is under seal. Let's
4 wait and see what you are doing with it.

5 MR. JUSTUS: Okay.

6 BY MR. JUSTUS

7 Q So let me direct your attention to page 49. As Your
8 Honor pointed out, this is under seal. So you're going to
9 have to kind of follow my lead. So don't shout out any
10 numbers.

11 Let's go to page 49.

12 Okay. So this is the -- the top row is the
13 DoubleClick bid manager spending in 2018, correct?

14 A Sorry. Say --

15 Q So you are on page 49, right?

16 A Uh-huh.

17 Q I think I can read the title to you. Historical
18 Managed Revenue and Net Revenue. Do you see that? That's
19 the slide you're on?

20 A Yep.

21 Q And in the top row, it has an entry for DoubleClick bid
22 manager. Do you see that?

23 A Yes, I do.

24 Q Do you see that the revenue that OpenX received from
25 DoubleClick bid manager increased substantially from 2017 to

Cross-Examination - T. Cadogan

1 2018?

2 A 2017 to 2018?

3 Q Yes .

4 A No, it's not a very substantial increase.

5 Q How about this? Is it an increase?

6 A Small.

7 Q Okay. Well, you just testified a few minutes ago it
8 was a precipitous drop. So a small increase is fairly
9 different than a precipitous drop. Can we agree on that?

10 A I said, again, it was expected, not previous year.

11 Q Okay. Okay. So your testimony is that it's not that
12 DV360 spending on OpenX dropped in 2018. It's that it did
13 not grow as much as you thought it would grow? That's your
14 current testimony before the Court?

15 A It also dopped in --

16 Q No. I'm sorry. Please answer my question.

17 THE COURT: Wait. Wait. All right. Just
18 don't jump on the witness. Let him finish. All right.

19 THE WITNESS: Yeah. So yes, my testimony was
20 that we had expected, based on the trends that you saw
21 in 2016 to '17, what you see here. Those will
22 continue. Then we saw a very sharp reduction against
23 what we expected.

24 And I would have to see the documents again to
25 know exactly what it was its prior year for the Q4 period.

Cross-Examination - T. Cadogan

1 BY MR. JUSTUS

2 Q But we agree what the DV360 spending through OpenX
3 actually increased from 2017 to 2018, correct?

4 A A small amount, yes.

5 Q Okay. I think you started your testimony saying that
6 OpenX had difficulty competing against DFP because of DFP's
7 superior access to AdX demand. Is that close enough?

8 A Yes.

9 Q But OpenX in the ordinary course of its business
10 determined that there were other problems with the design
11 and sell of its ad server, correct?

12 A Yes, that's fair.

13 Q Let's talk about some of those. For example, in 2013,
14 OpenX provided low levels of sales focus in marketing
15 support for its ad server. Do you agree with that?

16 A Is there a source or a particular reference for that?

17 Q Sure.

18 MR. JUSTUS: Your Honor, did you have a
19 question?

20 THE COURT: Yes. Mr. Cadogan, we're having
21 trouble hearing you now.

22 THE WITNESS: Oh, I'm sorry. I'll go back to
23 handheld.

24 THE COURT: Did your arm get tired?

25 THE WITNESS: No. No. I think my hand can

Cross-Examination - T. Cadogan

1 handle it. I'm good. I got you. I'm sorry.

2 THE COURT: Go ahead.

3 MR. JUSTUS: Thank you.

4 BY MR. JUSTUS

5 Q So yeah. Let's look at a document together. Let's go
6 to Tab 1 in your binder.

7 MR. JUSTUS: So this is Plaintiff's Trial
8 Exhibit 1501. Again, Your Honor, we're not seeking to
9 admit this into evidence. So this is PTX 1501. We're
10 not going to seek to admit this in evidence. I am just
11 going to ask Mr. Cadogan some questions about it.

12 BY MR. JUSTUS

13 Q So do you have it, Mr. Cadogan?

14 A Yes, sir, I do.

15 Q Okay. So you see this is an email from John Gentry to
16 you, dated November 22, 2013. Do you see that?

17 A Yes.

18 Q And who is John Gentry?

19 A At that time, John was the president of the company.

20 Q Okay. And you at that time were the CEO of the
21 company?

22 A That's correct, yes.

23 Q So this is an email from the president of the company
24 to the CEO of the company attaching a slide deck; is that
25 right?

Cross-Examination - T. Cadogan

1 A That looks right, yep.

2 Q All right. So now let's look at the deck. It is
3 called Ad Server Quarterly Business Review, and it's dated
4 November 2013. Do you see that?

5 A Uh-huh.

6 Q All right. Well, let's go to the page number 604
7 together.

8 A 604?

9 Q Yes, sir.

10 THE COURT: Or page 2.

11 BY MR. JUSTUS

12 Q Or page 2. Do you see executive summary?

13 A Yes.

14 Q So do you see one-third of current ad server revenue
15 churning or at risk of churning? Do you see that?

16 A I do.

17 Q And then it says, "Low level of sales focus and
18 marketing support exacerbated problem." Do you see that?

19 A I do.

20 Q So can we agree that in 2013, one problem OpenX had in
21 selling its ad server was that it had low levels of sales
22 focus in marketing support?

23 A It's a cause and effect issue. We had low level of
24 sales marketing because we were unable to win. So we were
25 not investing when we were continuing to lose money trying

Cross-Examination - T. Cadogan

1 to win business against a competitor that we couldn't beat.

2 Q Okay. I'm not sure that was my question, sir.

3 A Oh, sorry.

4 Q So my question is can we agree in 2013 for the OpenX ad
5 server, there were low levels of sales focus and marketing
6 support?

7 A As a consequence of not being able to compete very
8 effectively for the reasons we've discussed earlier in my
9 testimony.

10 Q So that's a yes?

11 A It's a no. It's a yes and here's why.

12 Q Okay. And then do you recall that in November 2013,
13 OpenX analyzed the churn of customers from its ad server?
14 Do you recall that?

15 A No, of course I don't. It's 11 years ago.

16 Q Yes, sir. Well, let's look at a document together.
17 Why don't you flip to Tab 2 in your binder.

18 A Okay.

19 Q This is PTX 1500.

20 MR. JUSTUS: Again, this is a document that
21 we will question him about but are not seeking to
22 admit.

23 BY MR. JUSTUS

24 Q Let me know when you're there.

25 A Sure, I'm there.

Cross-Examination - T. Cadogan

1 Q All right. And then can we go to -- oh, so dash 020?

2 A Just tell me the page number.

3 Q Yeah, or page 19. So either 19 on the slide or 020 at
4 the bottom right, whichever you prefer.

5 A Yeah, 19. Okay.

6 Q Okay. And do you see where it says churn analysis? Do
7 you see that?

8 A Yep.

9 Q And then you see take aways?

10 A Yep.

11 Q And it says, "The main reasons for churn are product
12 related." Do you see that?

13 A I do.

14 Q And then it lists some product-related churn columns,
15 right?

16 A Yep.

17 Q The first one is, "VAST video ad serving not supported
18 properly." Do you see that?

19 A Yep, I do.

20 Q Any reason to doubt that was a problem with the OpenX
21 ad server in 2013?

22 A No. If it's written here, I'm sure it was a problem.

23 Q And then the second one says, "Significant
24 discrepancies encountered." Do you see that?

25 A Yes, I do.

Cross-Examination - T. Cadogan

1 Q Do you have any doubt that was another product-related
2 problem with the OpenX ad server in 2013?

3 A No, I don't.

4 Q All right. Let's go to the third bullet, "Lack of
5 support for flexible ad sizes." Do you see that?

6 A Yes, I do.

7 Q Do you have any reason to doubt that was a
8 product-related problem --

9 A No. We can keep doing this. They're all a function of
10 a reduced investment because we weren't able to compete.
11 Yeah, I can read all of them, and they are all right.

12 Q All right. So let me ask you a question. There's a
13 list product-related churning causes. Do you see that?

14 A Yep.

15 Q So and there are -- and I'm sorry if I miscount these,
16 but I think there may be seven bullets.

17 A Yeah, that looks right.

18 Q Tell me: In which bullet is there an inability to
19 access real-time AdX demand?

20 A It's not there.

21 Q Okay.

22 A It's like finding a needle in a haystack.

23 Q I'm sorry, sir?

24 THE COURT: There's no question, no comments.

25 Let's go.

Cross-Examination - T. Cadogan

1 THE WITNESS: I'm sorry, Your Honor.

2 BY MR. JUSTUS

3 Q So okay. Let's go. Can we look at that document? I'm
4 so sorry. Can we go back to that document and look at
5 page 20? So it's just the next page.

6 A Yeah, sure.

7 Q And do you see where it says, "win loss analysis - # of
8 accounts"?

9 A Yes, I do.

10 Q And then it says, "lost opportunity issues." Do you
11 see that?

12 A Yes.

13 Q And so one of those is, "DFP has better a workflow."
14 Do you see that?

15 A Yes, I do.

16 Q And DFP, that's the Google ad server?

17 A Yes, it is.

18 Q And then another reason why OpenX lost to DFP is
19 because DFP has migration tools. Do you see that?

20 A Yes, I do.

21 MR. JUSTUS: Okay. Your Honor, I have gotten
22 a note from my colleagues that point out I failed to
23 introduce into evidence Defendant's Exhibit 843. That
24 was the one where it was under seal, but I think given
25 the questioning, it merits being entered into evidence

Cross-Examination - T. Cadogan

1 under seal.

2 MR. VERNON: Which one?

3 MR. JUSTUS: 843 unless I have this wrong.

4 THE COURT: Is there any objection from
5 OpenX's counsel for that?

6 MR. JUSTUS: It's 843. We talked about it
7 earlier. I just accidentally missed it.

8 MR. GRECO: No objection.

9 THE COURT: All right. There's no objection.

10 MR. GRECO: It will still be redacted,
11 correct?

12 THE COURT: The version that I have is not
13 redacted, correct? It's in my book.

14 MR. JUSTUS: So, Your Honor, on the first
15 page, I think that it says under seal. So once they're
16 under seal, they just have that notation.

17 THE COURT: Then none of this exhibit will be
18 on your public display?

19 MR. JUSTUS: Yes. Yes, Your Honor.

20 THE COURT: All right. It's in. All right.
21 It's Defense Exhibit 843 under seal.

22 MR. JUSTUS: Thank you, Your Honor.

23 BY MR. JUSTUS

24 Q So let's look at another document together, sir. Let's
25 go to Tab 3 of your binder, and this is DTX 181.

Cross-Examination - T. Cadogan

1 MR. JUSTUS: We'd like to move that into
2 evidence.

3 THE COURT: Any objection?

4 MR. VERNON: No objections.

5 THE COURT: All right. It's in.

6 BY MR. JUSTUS

7 Q All right. So this is -- this is an email from you to
8 others dated December 6, 2013, with subject board strategy
9 session follow-up notes and conclusions. Do you see that?

10 A Yes, sir.

11 Q All right. Let look at the first page, and a little
12 over halfway down the page, there's a number three with ad
13 serving written in bold. Do you see that?

14 A Yep.

15 Q And do you see where it says the ad serving category is
16 seen as increasingly commoditized and thus is lower value
17 both financially and strategically. Do you see that?

18 A Yes.

19 Q Do you have any reason to doubt that your notes -- that
20 your board notes are accurate?

21 A No, I don't.

22 Q Okay. Let's go now, sir, to page 2.

23 A Page 2?

24 Q Yeah. And go to where you wrote overall conclusions.

25 And do you see where it says ad serving has lost its luster

Cross-Examination - T. Cadogan

1 strategically and is more commoditized competitively. As a
2 result, it should become a lower priority. We should find
3 suitable way to gracefully our investment in and exposure to
4 this business. Do you see that?

5 A Yes, I do.

6 Q So that was the strategy you set with regard to the ad
7 server when you were CEO in 2013, right?

8 A Yeah. I had mentioned that earlier, that we were going
9 to reduce investment because the ad server alone. We were
10 not able to complete.

11 Q Okay. OpenX offered an open-source ad server too, and
12 that was called OnRamp. Is that accurate?

13 A You may remember but that --

14 Q Sorry. OnRamp.

15 A So that rings a bell. Honestly, we didn't have a lot
16 of involvement with the open-source ad server, but that does
17 sound right.

18 Q Let's do this. Why don't you look at Tab 4, and we're
19 going to use it just to refresh your recollection.

20 A Sure. Oh there, you go.

21 Q So take a second. I mean, mindful of it's already been
22 a long day, but just take a second to in particular focus on
23 the first paragraph and the last and the end of that
24 article.

25 A Okay.

Cross-Examination - T. Cadogan

1 Q So you now recall that OpenX operated an open-source ad
2 server known as OnRamp?

3 A Well, the distinction is we didn't operate it. That's
4 the point of an open-source product. So it was the original
5 genesis of OpenX back pre-2008. That turned into ultimately
6 OnRamp. Thank you for reminding me of the name. We didn't
7 operate it. It was offered as a software that people could
8 run and adapt in their own fashion.

9 Q Okay. Fair enough. OpenX offered a set of software
10 known as OnRamp that was open-source, correct?

11 A Yeah, but to the extent -- I don't even know if it's
12 accurate to say we offered it. We enabled it to exist, I
13 would say.

14 Q Okay. And then OpenX shut it down in 2013 after it was
15 hit by a massive malware attack, right?

16 A That's one of the dangers of certain open-source
17 software, yeah.

18 Q Okay. And then, sir, do you recall that by September
19 of 2014, OpenX had only two developers working on its
20 enterprise ad server?

21 A I don't recall the specific number, but I wouldn't be
22 surprised, given we were reducing the investment, that the
23 number was low.

24 Q Okay. And then by 2015, OpenX had decided to dial back
25 its ad server and to move into new areas; is that right?

Cross-Examination - T. Cadogan

1 A That sounds about right, yeah, timewise.

2 MR. JUSTUS: Your Honor, I'm about to go to a
3 new module if it makes sense to take the afternoon
4 break now.

5 THE COURT: It's too early.

6 BY MR. JUSTUS

7 Q Okay. So OpenX launched its exchange in July of 2009.
8 Do I have that date right, or am I off by a month or two?

9 A Technically, the very baby start was September 2008.
10 Then we went to the sort of beta in March or April 2009,
11 somewhere in there.

12 Q Okay. That's helpful.

13 A Sure.

14 Q So within a few months of its launch, OpenX's exchange
15 doubled in size. Is that accurate?

16 A I can't remember. I mean, doubling from zero is a
17 small number. So it's possible, you know.

18 Q All right. Well, let's look at another document.
19 Let's go to Tab 12. This is an interview you gave to ad
20 exchanger in 2009. So I might just direct your attention
21 to --

22 A How young I look? I'm sorry.

23 Q Maybe if you just turn to page 2. Now, I'm not going
24 to read it out loud to you. I will just direct your
25 attention to the question that begins can you discuss.

Cross-Examination - T. Cadogan

1 A Sure, yeah.

2 Q So did you have a chance to read it?

3 A The statement or the --

4 Q Don't read it out loud. Just read it to yourself. I
5 am going to ask you if that refreshes your recollection
6 concerning the question I just asked.

7 A Regarding the growth?

8 Q Yes, sir.

9 A That sounds right in the very early days, encouraging
10 growth, yeah.

11 Q Okay. And then by 2013, OpenX had many top publishers
12 and advertisers as clients, correct?

13 A A reasonable amount of publishers. I wouldn't say --
14 definitely probably many advertisers at that point.

15 Q Okay. And OpenX had massively scalable architecture
16 with 99.9 uptime across three continents and five data
17 centers; is that right?

18 A Is that the same time period?

19 Q Yeah, 2013. I'm sorry.

20 A Yeah. That sounds about right, yes.

21 Q Okay.

22 A We made progress for sure.

23 Q And then by 2015, OpenX had doubled revenue and tripled
24 profit across the -- let me restate that question. That's a
25 very hard question to ask.

Cross-Examination - T. Cadogan

1 By 2015, OpenX had doubled revenue and tripled
2 profit in two years, correct?

3 A I don't have the numbers in my head, but ballpark, yes.
4 That sounds right. We were -- I think I had mentioned
5 earlier that after we launched header bidding, we started to
6 really grow significantly. So that sounds like in the right
7 zone.

8 Q And then by 2016, the OpenX ad exchange was scaling
9 profitably, correct?

10 A Yes. Yes, it was.

11 Q And then by 2017, OpenX had thousands of publisher and
12 advertiser customers, correct?

13 A Yes.

14 Q And it also had large investors by 2017?

15 A It had large investors for several years prior to that,
16 yeah.

17 Q Okay. And then by 2017, the OpenX ad exchange had
18 significant scale; is that correct?

19 A It depends how you define scale. Compared to AdX, it
20 was still a peanut. But compared to where we had started,
21 it had grown a lot.

22 Q Let me -- so this is going to be a little challenging
23 because I want to show you something that's under seal, but
24 I won't try to put it into evidence. So can we go to
25 Tab 15. This is PTX 1560. And then I'll just ask you to

Cross-Examination - T. Cadogan

1 turn to page 12 but --

2 A Twelve?

3 Q Page 12. Okay. Are you there?

4 A Yes, sir.

5 Q And do you see number two? Don't read it out loud.

6 Just tell me if you see it.

7 A Massive scale global operation.

8 Q Okay. We can -- you can -- I think we are done with
9 that document.

10 A You know this is a pitch deck, right, a pitch deck.
11 You know that people tend to do a little chest pumping in
12 pitch decks, right?

13 Q Can we go to --

14 A Maybe you don't.

15 Q I'd like --

16 mr.ju:

17 MR. JUSTUS: So, Your Honor, I am going to
18 seek to admit DTX -- I've already put that in. Sorry.

19 BY MR. JUSTUS

20 Q So in 2010, OpenX had an ad server and an ad exchange,
21 right?

22 A Yes.

23 Q And OpenX offered a feature that allowed ad network
24 demand sources in the OpenX ad server -- and this is a
25 little complicated, so I'm going to try to say it slower.

Cross-Examination - T. Cadogan

1 If it doesn't make sense, I'll try to say it better. But
2 OpenX offered a feature that allowed ad network demand
3 sources in the OpenX ad server to set a floor in the OpenX
4 ad exchange, correct? This is a long time ago.

5 A It is a long time ago. I don't remember the ad network
6 being able to set the floor. I remember the publisher being
7 able to set the floor. I just don't remember -- I don't
8 remember the ad network being able to do that.

9 Q All right. Well, let's look at a document together,
10 and this one is public. So no challenges on this one.
11 Let's go to Tab 17.

12 A 17?

13 Q 17. And so I'm just going to try to refresh your
14 recollection with this document. So what I'm really going
15 to ask you to do is go to page 11 of Tab 17.

16 A Page 11.

17 Q It's the last page.

18 A Okay, yeah.

19 Q And then I want you to just read to yourself the second
20 to last paragraph that starts in addition.

21 A Yes.

22 Q So now let me re-ask the question. So in 2010, OpenX
23 offered a feature that allowed ad network demand sources in
24 the OpenX ad server to set a floor in the OpenX exchange,
25 correct?

Cross-Examination - T. Cadogan

1 A That's now how -- my understanding based on reading
2 this. So what's happening here is the ad exchange -- you
3 could -- if you wanted to, you could access the ad exchange.
4 That could supply a bid into the ad server. But the
5 market -- by the way, OpenX market was an early name for the
6 ad exchange -- will only serve if it can beat the price that
7 the publishers fallback ad network would pay for it. So
8 there what the publisher was doing is saying, hey, I've got
9 a network. The fallback would be sort of your like default
10 ad network. That would typically fill most of your demand
11 or have a good shot at filling your demand. They would have
12 a sort of price that the publisher would set. Let's say
13 it's ad.com. Let's say it's a dollar. It's probably more
14 like 15 cents actually. But let's say it's 15 cents. I'm
15 going to set that. That my fallback sort of backup ad
16 network. And if the exchange could beat that, great. If
17 not, then I sent to it my fallback guy.

18 Again, this is a while ago, but the publisher is
19 sort of configuring this and setting this based on who they
20 want as their ad networks. Does that make sense?

21 Q I think so. OpenX called this feature dynamic
22 allocation, right?

23 A I don't remember what we called it.

24 Q Well, let's do this. Let's see if I have any better
25 luck this time around. And if not, maybe we'll go to

Cross-Examination - T. Cadogan

1 something else.

2 Let's go to Tab 18. And then when you get there,
3 it would be great if you could flip to 909.

4 A Can I just ask: Do we know when this document was
5 from?

6 Q Yeah. Let me flip so I don't delay us by losing my
7 page, and then I will answer that question.

8 So I think if you look -- it's from 2015.

9 A Okay. Thanks. Okay.

10 Q Okay. So are you at -- so it's numbered page 40, and
11 it's got 909 in the bottom right. Are you there?

12 A Give me a second. Page 40.

13 Okay. So we skipped four to five years, right?

14 Q I'm sorry?

15 A We're five years ahead of where we were. So the names
16 might have changed.

17 Q Sure.

18 A Okay.

19 Q And so I'll just ask you. There's a slide, and it's
20 got three different rows. Just take a second and read the
21 first row.

22 A So why is it important -- that one?

23 Q Yeah. So the row that says dynamic allocation, read
24 that row.

25 A That's in like 6 point font.

Cross-Examination - T. Cadogan

1 Q I'm sorry. Do you want me to --

2 A That's my document. That's my fault.

3 Q We can try to blow it up on the screen if that is
4 better for you.

5 A Just give me a moment.

6 Q Okay.

7 A Okay.

8 Q So by 2015, OpenX had a feature similar to Google's
9 dynamic allocation feature, correct?

10 A Yeah, roughly.

11 Q Okay. You also considered OpenX to have a first look
12 product feature, correct? That's not on this document.
13 That's just a question to you.

14 A How -- could you elaborate a little bit in how you
15 understand that?

16 Q Yeah. Let's just look at a document since that seems
17 to make things a little easier. Let's go to Tab 25.

18 A Twenty-five.

19 Q And this document is called Overview of OpenX, and it's
20 dated April 6, 2015. Are you at that document?

21 A Yeah, I'm with you.

22 Q All right. Then let's turn together to 646 in the
23 bottom right-hand corner. Are you there?

24 A Yes.

25 Q Do you see where it says, "Reach your audience through

Cross-Examination - T. Cadogan

1 our direct relationships and unique access." Do you see
2 that?

3 A Yes.

4 Q And then direct access to -- then it says OpenX ad
5 exchange. Do you see that?

6 A I do.

7 Q That comes down and says direct access on all publisher
8 inventory. Do you see that?

9 A Yeah. That's typically through the header bidder which
10 is going to get access to -- any publisher who integrated,
11 that would give us access to their inventory.

12 Q Okay. You go down, and it says OpenX ad server. Do
13 you see that?

14 A Yes.

15 Q And it says first look integration with full ad
16 management solution. Do you see that?

17 A Yes, I do. And by this point, 2015, the ad server, as
18 you've indicated, is pretty much a sideshow.

19 Q But in 2015, the OpenX ad server had first look from --
20 had first look functionality, right?

21 A I don't actually remember specifically what that meant
22 at that point. That's also largely irrelevant given the ad
23 server is on the way out. But yes, that's what the words
24 say.

25 Q Okay. One second.

Cross-Examination - T. Cadogan

1 MR. JUSTUS: So at this point, I think we're
2 going to try to put another defendant's trial exhibit
3 into evidence. This document is DTX 0517, but it is
4 under seal, Your Honor. So perhaps I should ask some
5 questions on it before you make the call on whether to
6 admit it.

7 THE COURT: Is there any objection?

8 MR. VERNON: What's the number?

9 MR. JUSTUS: Tab 11. I'm sorry.

10 THE COURT: Is there any objection?

11 MR. JUSTUS: I'm sorry. That was my bad.

12 MR. VERNON: Did you ask a question about
13 this?

14 MR. JUSTUS: No, not yet.

15 MR. VERNON: No objections, Your Honor.

16 THE COURT: All right. Then it's in, but
17 again, it's sealed, so this will not appear tomorrow on
18 the websites.

19 MR. JUSTUS: Yes, Your Honor.

20 BY MR. JUSTUS

21 Q Okay. We're going to have to -- well, let's go to
22 Tab 11 together. Let's go to page 31, and let me know when
23 you're there.

24 So I just want to -- and I guess I should have
25 asked this before -- well, let me just ask my question. Are

Cross-Examination - T. Cadogan

1 you on that page?

2 A Yeah, this is another M&A discussion deck.

3 Q All right. So you're on page 31. When header bidding
4 first became popular, it created the opportunity for
5 misconduct; is that right?

6 A Well, it didn't start there. It created the
7 opportunity for publishers to generate a lot more revenue,
8 which is why it was embraced so wholeheartedly because it
9 worked around the block -- sorry to say -- that Google had
10 created. So no, that's not the primary function. That was
11 a side effect.

12 Q Okay. So one side effect of header bidding was the
13 opportunity for misconduct; is that right?

14 A Well, can you define misconduct and by who.

15 Q Well, how about malfeasance? Can we agree that a side
16 effect of header bidding was the possibility of malfeasance?

17 A Definitely not. What kind of malfeasance by who and to
18 who?

19 THE COURT: This is not helping. We have
20 already heard about this. Let's move on to something
21 else.

22 MR. JUSTUS: Yes, Your Honor.

23 BY MR. JUSTUS

24 Q OpenX worked with Google on exchange bidding; is that
25 correct?

Cross-Examination - T. Cadogan

1 A We did, yes.

2 Q Okay. And then in addition to participating in
3 exchange bidding, OpenX also participates in Prebid; is that
4 right?

5 A Yes, we did.

6 Q And to your knowledge, it still does, right?

7 A I think so.

8 Q All right. Let's -- and Prebid is a collection of ad
9 tech companies that oversees and funds the development of
10 prebid header bidding technology, correct?

11 A Yes, that's right.

12 Q I want to pull up just very briefly Demonstrative
13 Cadogan DX 1.

14 Okay. So this is a page from the Prebid website
15 listing the Prebid board of directors. Do you see that
16 there's an OpenX representative on the Prebid board of
17 directors -- and we are going to have -- Joel Meyer, do you
18 see that?

19 A Oh, yeah, I do.

20 Q And there's a Magnite representative on the Prebid
21 board of directors? That's Garrett McGrath. Do you see
22 that?

23 A Yes, I do.

24 Q Is he is chairman?

25 A It looks like it, yep.

Cross-Examination - T. Cadogan

1 Q And then there's a PubMatic member of the Prebid board
2 of directors, and that's, of course, Ankur Srivastavavie,
3 correct?

4 A Yes.

5 Q And there's a Trade Desk member on the board of
6 directors, and that's Bill Simmons?

7 A Yes.

8 Q And there's an Index Exchange member as well, and
9 that's Michael McNeeley, correct?

10 A Yes.

11 Q And then there's a Microsoft representative, Paul
12 Farrow, correct?

13 A Yes, that's right.

14 THE COURT: All right. We're going to take
15 the afternoon break now until 4:30.

16 (Brief recess taken.)

17 BY MR. JUSTUS:

18 Q Okay. Sir, I only have a few remaining things to
19 cover, and then I'll hopefully be finished.

20 I'd actually like to ask you to turn back to
21 Tab 10. This is a document that's under seal that's been
22 admitted into evidence. So just be mindful of that.

23 Now, I only have two questions, but the predicate
24 to that is turning to page 49.

25 A Okay, page 49.

Cross-Examination - T. Cadogan

1 Q Are you there?

2 A Yes.

3 Q Sir, please don't say these numbers out loud, but can
4 you confirm that the take rate number listed for 2018 in
5 this board meeting presentation is accurate to the best of
6 your recollection?

7 A Yes.

8 Q The same question for 2019. To the best of your
9 recollection?

10 A Yes.

11 Q Okay. You can put that aside.

12 Okay. If you turn to Tab 20 --

13 MR. JUSTUS: So, Your Honor, at this point,
14 we'd offer DTX 0384 into evidence.

15 THE COURT: 384?

16 MR. JUSTUS: Yes, Your Honor, Tab 20.

17 THE COURT: Any objection?

18 MR. VERNON: No objection.

19 THE COURT: All right. It's in.

20 BY MR. JUSTUS:

21 Q And so, sir, will you please turn to page 9 of that
22 presentation. Let me know when you're there.

23 A I'm there.

24 Q And this slide lists various OpenX ad exchange
25 competitors, correct?

Cross-Examination - T. Cadogan

1 A Yes, that's right.

2 Q It notes that those competitors compete across devices,
3 screens, and formats, right?

4 A That's what the document says.

5 MR. JUSTUS: Okay. All right. Last thing.

6 Tab 22, this is fully under seal, but we offer into
7 evidence DTX 682.

8 MR. VERNON: No objection.

9 THE COURT: All right. That also will not be
10 on the website tomorrow, but it's in, 682.

11 MR. JUSTUS: Yes, Your Honor.

12 BY MR. JUSTUS:

13 Q And can I just direct your attention to the PowerPoint
14 Slide No. 21.

15 And if you give me just one second so I can get
16 there.

17 A Page 21?

18 Q Yes.

19 A Right, I'm there.

20 Q Again, this is under seal. So please don't say the
21 contents of this slide out loud. But if you go to the
22 fourth bullet, do you agree that the fourth bullet reflects
23 a competitive threat that OpenX was experiencing in -- at
24 this time, 2019?

25 A I think this is a little bit more reflective of a

Cross-Examination - T. Cadogan

1 general trend that was affecting the whole industry because
2 people were trying to become more efficient with their
3 buying. And of course, therefore, we were affected and had
4 to manage through that. But it's an industrywide trend that
5 we're calling out on this slide.

6 Q And you agree -- just look at the text where it refers
7 to larger pubs. You agree with kind of the language around
8 there, correct?

9 A Oh, I'm sorry. I'm not sure I'm on the -- at page 21?

10 Q Page 21, the fourth bullet.

11 A Sorry. I was actually reading the third bullet. I
12 clearly cannot count. Okay.

13 Q Do you agree that was a threat that OpenX --
14 competitive threat OpenX was facing at the time?

15 A You know, this one was -- it's one of those ones that's
16 been debated forever. It's a possible threat. It's still
17 largely hypothetical. This CTV point, I think, is a little
18 bit more valid. More generally, it was a little bit more on
19 the "it's a possible threat" end of things versus this is
20 actually happening. And it's still -- interestingly -- it's
21 what, five, six years later -- this still hasn't really
22 happened even a half a decade later, the threat that we're
23 outlining here.

24 Q Except for CTV?

25 A Even in CTV, it's kind of a mixed bag. There's other

Redirect Examination - T. Cadogan

1 reasons for that. Anyway, I won't go into those.

2 Q That's okay. This was a threat that OpenX was tracking
3 at the time and still tracks?

4 A Yes, that's fair. Yes.

5 MR. JUSTUS: Your Honor, I pass the witness.

6 THE COURT: All right. Any redirect?

7 MR. VERNON: Yes, Your Honor.

8 REDIRECT EXAMINATION

9 BY MR. VERNON:

10 Q Counsel asked you about a document stating that there
11 were multiple reasons for OpenX's underperformance in the
12 summer of 2018. Do you remember that?

13 A I do, yes.

14 Q How did DV360's spending on OpenX in the summer of 2018
15 compare to its spending on OpenX in the summer of 2017?

16 A It was lower than our expectations for that period if
17 you are talking about the summer. I don't remember the
18 year-over-years. I remember where we were versus
19 expectation.

20 Q What happened to DV360's spending on OpenX after that
21 in the fall of 2018?

22 A That's when the real hit came, which is September,
23 weakened in October, and November were very severe
24 reductions, which we reached out to Google about, obviously,
25 given the massive change that we'd been seeing.

Redirect Examination - T. Cadogan

1 Q Can you turn in your binder to PTX 160? This is in the
2 white binder, the smaller binder.

3 A We'll trade binders. Thank you.

4 THE COURT: Is there any objection to 1600?

5 MR. JUSTUS: One second, Your Honor.

6 No, Your Honor.

7 THE COURT: It's in.

8 BY MR. VERNON:

9 Q Let me know when you're ready.

10 A Yes, sir, I'm there.

11 Q This is an email from you to Sam Cox at Google; is that
12 right?

13 A Yes. Yes, it is.

14 Q And if you look at the second paragraph, the larger
15 paragraph, you write, "As you can see, things were largely
16 on track through May, then went sideways in June and July,
17 recovered partially in August, and then started to slide
18 more in September and kept getting worse to the point where
19 November is looking like negative 40 percent in spend YOY.
20 I don't need to belabor the significance of this for us."

21 Did I read that right?

22 A Yes, you did.

23 Q What does YOY mean?

24 A Year over year.

25 Q So was the large negative 40 percent drop in spending

Redirect Examination - T. Cadogan

1 from DV360 before or after the document that counsel showed
2 you before about OpenX's performance in the summer of 2018?

3 A It was after that document that he showed me.

4 Q Counsel also asked you about --

5 THE COURT: Let me stop. Did you get a
6 response to this?

7 THE WITNESS: Yes. I'm sorry, Your Honor. I
8 said the document that -- what happened here was after
9 the document that Google's counsel showed me.

10 THE COURT: No. But I mean, this is an email
11 that you sent on --

12 THE WITNESS: Oh, I'm sorry. Did I get a
13 response?

14 THE COURT: -- November 21, right? You end
15 by saying "How can you help here? Thanks, Tim."

16 My question is did you get a response to the
17 email?

18 THE WITNESS: I don't recall getting a
19 response, Your Honor.

20 BY MR. VERNON:

21 Q Counsel also asked you about some feature gaps for
22 OpenX's ad server.

23 Do you remember that?

24 A Yes, I do.

25 Q And earlier in your testimony you've said that the main

Redirect Examination - T. Cadogan

1 reason that OpenX found it difficult to compete with DFP was
2 not being able to access AdX.

3 Do you remember that?

4 A Yes, I do.

5 Q Why did you say that the main reason was -- that it was
6 difficult to compete with DFP was OpenX's publisher's lack
7 of access to AdX rather than features?

8 A Because for publishers, priority number one, two, and
9 three is money, is revenue. And so they will really have to
10 choose the most effective way to generate the most amount of
11 revenue. So even if you had been offering worse features,
12 they would have gone with the money. And so because we
13 didn't have access to the biggest pool of money, which was
14 AdX, it was very hard for us to sell them the OpenX ad
15 server.

16 Q Let me ask you to turn to Tab 1 in the defendant's
17 binder, which is the black binder. This is PTX 1501.

18 A Sorry. Tab 1?

19 Q That's right.

20 A Okay. Yeah, I'm there.

21 MR. VERNON: The United States would like to
22 offer this into evidence.

23 THE COURT: Any objection?

24 MR. JUSTUS: No, Your Honor.

25 THE COURT: All right. 1501 is in.

Redirect Examination - T. Cadogan

1 BY MR. VERNON:

2 Q Counsel also asked you some questions about whether
3 access to AdX was mentioned in any of OpenX's documents
4 discussing the reasons why it was hard for OpenX to compete
5 with DFP.

6 Do you remember that?

7 MR. JUSTUS: Objection, Your Honor. Just so
8 it's clear, I actually didn't ask that question. I
9 asked about one specific document.

10 MR. VERNON: Okay. I'll withdraw the
11 question.

12 BY MR. VERNON:

13 Q Can we turn to page 10. It starts with the words "Why
14 are we not winning ad server deals?" at the top.

15 A Yes.

16 MR. VERNON: I think the monitor is not
17 there. I think maybe one or two more slides on the
18 monitor. You are on 8, so go to 10. There you go.

19 BY MR. VERNON:

20 Q Now, I recognize this is hard to read. I believe it
21 says "External challenges. Incumbent stronghold. DFA/DFP
22 position. AdX/AdSense monetization."

23 Do you see that?

24 A Yes, it's the top bullet.

25 Q And what does "AdX/AdSense monetization" mean?

Redirect Examination - T. Cadogan

1 A It means that DFP was tied to AdX and much of the
2 AdSense demand which were flowing to DFP, and the only way a
3 publisher could get access to real-time demand from AdX was
4 by using DFP. They were linked. Therefore, as an ad
5 serving competitor, one could, practically speaking, not
6 effectively compete with that.

7 Q You can set that document aside.

8 You mentioned that OpenX did have some feature
9 gaps compared to DFP. Do you remember that?

10 A I do, yes.

11 Q Why did OpenX have those feature gaps?

12 A Primarily, it's a vicious cycle. We understood that
13 there were some gaps. I've mentioned a couple of them. But
14 because we've not been able to win more publishers, we were
15 not able to generate as much revenue. Therefore, we
16 couldn't reinvest as much of that revenue in developers to
17 build the functions that we knew would be competitive.

18 So it's a -- it's kind of a vicious cycle because
19 we were unable to win the publishers because we didn't have
20 the demand access. We couldn't get on to a virtuous cycle,
21 which is ultimately what led us to decide to close the
22 business, because it was uneconomic for us.

23 Q And what was the main reason why you couldn't win those
24 publishers?

25 MR. JUSTUS: Objection, Your Honor.

Redirect Examination - T. Cadogan

1 THE COURT: Wait. That's been asked and
2 answered several times. Let's move on, please.

3 BY MR. VERNON:

4 Q Counsel also asked you about OpenX having scale. Do
5 you remember that?

6 A I do, yes.

7 Q How does OpenX's scale compare to AdX's scale?

8 MR. JUSTUS: Objection, Your Honor. Lack of
9 personal knowledge.

10 BY MR. VERNON:

11 Q Do you have an understanding --

12 MR. VERNON: I can lay a foundation, Your
13 Honor.

14 THE COURT: More than that, I've heard that
15 enough too. Overruled.

16 BY MR. VERNON:

17 Q Okay. Counsel asked you about whether OpenX's ad
18 server had a dynamic allocation or a first look product. Do
19 you remember that?

20 A Yes, I do.

21 Q Did OpenX ever approach any exchanges to try to
22 integrate other exchanges' real-time bids into OpenX's ad
23 server?

24 A We did try to get integration with AdX. That was the
25 thing that most publishers wanted for obvious reasons that

Redirect Examination - T. Cadogan

1 we've covered and would have been great to be able to have
2 that and to have it compete with our exchange and offer that
3 combination to our publishers.

4 Q And what were OpenX's plans for which exchange would
5 bid first between OpenX and AdX?

6 A Actually, neither would bid first. We would have --
7 had we done that, we would have sent a bid request at the
8 same time to our exchange and AdX. We would've received the
9 bids, and we would've picked the highest one and presented
10 that to the publisher so they could have made the most
11 amount of money.

12 Q And why did those plans not come to fruition?

13 A Because Google was never willing to integrate with us.

14 MR. JUSTUS: Objection, Your Honor.

15 THE COURT: Overruled. You may answer the
16 question.

17 BY MR. VERNON:

18 Q I believe -- why did those plans not come to fruition?

19 A Because Google was never willing to integrate with us.

20 Q I'm going to do this slightly slowly to give your
21 counsel a chance to address any confidentiality issues that
22 may arise from this set of questions about take rates.

23 Earlier counsel for Google asked you about OpenX's
24 take rates in the, roughly, 2018 time period.

25 Do you remember that?

Redirect Examination - T. Cadogan

1 A Yes, I do.

2 Q How did OpenX's take rates change after 2018?

3 A They came down materially.

4 Q And why?

5 A Because we wanted always to compete, and the essence of
6 competition was giving the publishers as much revenue as
7 possible. And as we and our competitors were seeking to win
8 their business -- still via header bidding now -- we were
9 competing over time at lower rates so that we could give
10 more of the revenue to the publisher.

11 Q And without giving a specific number, as they went down
12 over time, how did they -- were they higher or lower than
13 20 percent?

14 A They started out higher, and then over time they moved
15 lower.

16 MR. VERNON: Okay. We pass the witness.

17 THE COURT: Any recross?

18 MR. JUSTUS: No, Your Honor.

19 THE COURT: All right. Does anybody
20 anticipate calling Mr. Cadogan again?

21 MR. VERNON: The United States does not.

22 THE COURT: How about the defense?

23 MR. JUSTUS: We do not, Your Honor.

24 THE COURT: All right. Then, Mr. Cadogan,
25 you're now released as a witness. That means you can

Read-In Deposition - B. O'Kelley

1 stay and watch the proceedings or leave, but you're not
2 to discuss your testimony with any witness who has not
3 yet testified.

4 Thank you.

5 THE WITNESS: Thank you, Your Honor.

6 THE COURT: All right. Now, do I understand
7 correctly that the next matter you want is a read-in?
8 Is that right?

9 MS. WOOD: We're going to finish the last
10 nine minutes of the O'Kelley video and then a read-in
11 for the rest of the afternoon.

12 Thank you, Your Honor.

13 THE COURT: Okay.

14 MS. WOOD: And, Your Honor, the deposition
15 binders for Mr. O'Kelley were passed out yesterday. We
16 could bring you another copy if --

17 THE COURT: I will just watch the screen.

18 MS. WOOD: Okay. May we proceed, Your Honor?

19 THE COURT: Yes.

20 (Video played.)

21 THE COURT: That's it?

22 MS. WOOD: Yep.

23 THE COURT: All right. Now, who are you
24 doing by deposition?

25 MR. TEITELBAUM: This would be the Helfand

Read-In Deposition - B. O'Kelley

1 deposition for Disney, Your Honor.

2 MS. SESSIONS: Do you want to do the exhibits
3 in connection with O'Kelley?

4 MR. TEITELBAUM: Oh, I believe Google has
5 some exhibits that they're offering with respect to
6 O'Kelley.

7 THE COURT: All right. Let's move them in.

8 MS. SESSIONS: Thank you, Your Honor. I
9 understand the government has no objections to these.
10 They are DTX 358, DTX 422, and DTX 1487.

11 MR. TEITELBAUM: That's correct, Your Honor.
12 No objections.

13 THE COURT: What was the last one?

14 MS. SESSIONS: 1487.

15 THE COURT: All right. So 358, 422, and
16 1487?

17 MS. SESSIONS: Yes, Your Honor.

18 THE COURT: All right. Those three are in.

19 MS. SESSIONS: Thank you.

20 THE COURT: All right.

21 MR. TEITELBAUM: And then in connection with
22 the Disney deposition, Your Honor, pursuant to an
23 agreement with Google, we would offer into evidence
24 PTX 1835, and we do have copies here.

25 THE COURT: Just one exhibit?

Read-In Deposition - B. O'Kelley

1 MR. TEITELBAUM: Just one exhibit. Then I
2 believe Google has additional exhibits to offer as
3 well.

4 MS. SESSIONS: We do, Your Honor. 1427;
5 1207, which is under seal; and 1374, which is also
6 under seal.

7 THE COURT: 1374?

8 MS. SESSIONS: Yes.

9 MR. TEITELBAUM: And to be clear, we have an
10 agreement on 1207 and 1376. I'm not aware of an
11 agreement at this time about the other one.

12 THE COURT: I'm sorry. When you say
13 agreement, agreement as to being under seal?

14 MR. TEITELBAUM: As to not objecting to
15 admissibility.

16 THE COURT: I'm having all three of them in
17 right now.

18 So Plaintiffs' 1835 and Defendant's 1427; and
19 1207, which is under seal -- so it will not appear on the
20 website tomorrow -- and 1374. Right?

21 MS. SESSIONS: Yes, Your Honor.

22 MR. TEITELBAUM: Your Honor, we do have a
23 hearsay objection to 1427.

24 THE COURT: Well, when we get to it, we'll
25 address it.

Read-In Deposition - B. O'Kelley

1 MR. TEITELBAUM: All right. Then we have
2 binders for everyone.

3 We also have copies of PTX 1835 just for
4 visibility's sake.

5 THE COURT: All right.

6 MR. TEITELBAUM: Thank you, Your Honor.

7 Just for the record, for the sake of efficiency, I
8 will be reading both Google's counsel's questions and our
9 questions because it is a consolidated set of deposition
10 designations.

11 THE COURT: All right. That's fine.

12 MR. TEITELBAUM: That will become very clear
13 with the very first sentence that I'm about to read.

14 THE COURT: What page are we on?

15 MR. TEITELBAUM: This is starting on the very
16 first tab that says "Helfand Deposition Designation
17 Digest." That's just the designations.

18 And just for the record, with respect to the
19 errata, those are addressed in the margins of the digest
20 just for clarity's sake.

21 THE COURT: All right.

22 MR. TEITELBAUM: And the red boxes, as per
23 usual, are for confidentiality. So I will not read
24 those out loud. We can all just read those to
25 ourselves, but they will be part of the record, I

Read-In Deposition - J. Helfand

1 assume.

2 THE COURT: All right.

3 MR. TEITELBAUM: All right. Thank you.

4 (The deposition of Jeremy Helfand is read as
5 follows:)

6 Q Good morning, Mr. Helfand. My name is David Pearl.
7 Like I said, I'm an attorney representing Google.

8 Can you -- can you please state your name for the
9 record.

10 A My name is Jeremy Helfand.

11 Q Do you understand you're here today to provide
12 testimony as a corporate witness for The Walt Disney
13 Company?

14 A Yes.

15 Q What is your current position at The Walt Disney
16 Company?

17 A My current position is executive vice president of
18 advertising and data platforms for The Walt Disney Company.

19 Q Great. At a high level, what are your roles and
20 responsibilities in your job?

21 A My responsibilities are to lead the portion of the
22 organization responsible for the development of products and
23 technologies for Disney's advertising business.

24 Q And when did you start working at Disney?

25 A I started working at Disney in 2020. I was working

Read-In Deposition - J. Helfand

1 previously at Hulu starting in June of 2018, which was
2 subsequently taken operational control by Disney, and
3 started to work for Disney in 2020.

4 Q Thanks. We're going to hand you another exhibit. This
5 will have the Bates Hulu-008733, and this will be Disney
6 Exhibit 3.

7 You can put that to the side.

8 Okay. Can you turn to page 741?

9 A Yes.

10 Q Do you see the slide is titled "Disney's Current
11 Position in the Market Competitive Landscape Total Video
12 Plus Display"?

13 A Yes.

14 Q What does the reference to "competitive landscape"
15 there mean?

16 A Reference to other competitors of advertising that we
17 would be competing against in the market for a share of
18 budget.

19 Q And looking at the list of or the sort of graph of the
20 companies here, do each of these represent a competitor for
21 Disney in the sale of advertising?

22 A All of these names tend to fall into one of the two
23 buckets that I described previously with respect to who
24 Disney competes with in the advertising market.

25 Q Does Disney have its own ad tech tools?

Read-In Deposition - J. Helfand

1 A Disney does have it owns ad tech tools.

2 Q Why did Disney create those ad tech tools?

3 A Disney created those ad tech tools because we believe
4 that, in order to create either differentiated capabilities
5 or to be able to develop products at the velocity required
6 to meet the, you know, transformation of advertising in the
7 industry, that we should invest in our own ad tech tools.

8 Q You mentioned -- you used the term "velocity." What do
9 you mean by that?

10 A What I mean is being able to build those capabilities
11 and deploy them into -- into market with a sufficient amount
12 of speed.

13 Q Can you -- can you list for me the ad techs that Disney
14 currently has?

15 A A few examples of ad tech tools that Disney has
16 includes the Disney ad server, the Disney real-time ad
17 exchange or what you would hear referred to as DRAX. Some
18 of our audience-based targeting capabilities, like Disney
19 Select are -- so those are a few of the capabilities or
20 tools that we have deployed, we've developed.

21 Q Does Disney have a tool called Hulu Ad Manager or
22 Disney Ad Manager?

23 A Yes, Hulu Ad Manager -- now Disney Ad Manager is our
24 self-service that enables advertisers to be able to set up
25 and deliver campaigns on their own without the assistance

Read-In Deposition - J. Helfand

1 of, you know, either a sales person or account manager.

2 Q Does Disney have a product called DXP?

3 A DXP is typically shorthand for Disney XP, which is our
4 cross-platform product. It is a combination of technology
5 and bundling of how we go to market to enable advertisers to
6 buy once from Disney and deploy that across multiple
7 inventory sources.

8 Q Okay. Thank you.

9 I'm going to introduce another exhibit here we'll
10 be marking as Disney Exhibit 4.

11 Do you recognize this document?

12 A I do.

13 Q What is it?

14 A It's a transcript from our Tech and Data Showcase.

15 Q And what is the Tech and Data Showcase?

16 A The Tech and Data Showcase is an annual event that
17 we've -- we've put on for the last three years as part of
18 our upfront selling process to highlight the technology and
19 data advancements we're making as part of our Disney
20 advertising offering.

21 Q And does this document look like a true and accurate
22 copy of the transcript of the Tech and Data Showcase?

23 A To the best of my knowledge.

24 MS. SESSIONS: Your Honor, at this time, this
25 is the disputed exhibit, DTX 1472 [sic], that we would

Read-In Deposition - J. Helfand

1 offer into evidence.

2 MR. TEITELBAUM: 1427 or --

3 MS. SESSIONS: 1427, sorry.

4 MR. TEITELBAUM: And, Your Honor, this would
5 be -- just because it's a transcript doesn't change the
6 fact that it's a purely out-of-court statement.

7 THE COURT: I don't have a copy of 1472 in
8 front of me.

9 MR. TEITELBAUM: I believe it's -- it is in
10 the binder at the third-to-last tab.

11 THE COURT: Okay. Hold on.

12 MS. SESSIONS: And I misspoke, Your Honor.
13 It's 1427. So that's why you can't find 1472.

14 THE COURT: Does it have that number, or does
15 it have the --

16 MS. SESSIONS: It's Exhibit 4 to the
17 deposition.

18 THE COURT: Yeah, that's what I'm looking
19 for.

20 Okay. DTX 1427. Here it is.

21 MR. TEITELBAUM: The government's objection
22 is this is just a transcript of out-of-court statements
23 admitted for their truth and so therefore hearsay.

24 THE COURT: I'm sustaining the objection.

25 All right. So that means 1427 is not in.

Read-In Deposition - J. Helfand

1 MR. TEITELBAUM: All right. So continuing
2 with the reading at page 31, line 24.

3 Q What is a self-serve platform?

4 A A self-serve platform is a -- is a tool or an interface
5 where an advertiser can enter all their campaign details,
6 upload their creative, and decide where and how they want to
7 run advertising across any of the Disney-enabled properties.

8 Q Are you aware of whether any of your competitors offer
9 self-serve platforms?

10 A Yes.

11 Q Which ones?

12 A Facebook, Google, Amazon, Snap are a few examples of
13 other self-serve platforms in the market.

14 Q Are there any others you can think of?

15 A One other I can think of would be Roku.

16 Q Do you know if TikTok offers one?

17 A I don't know for certain, but I believe so.

18 Q Do you consider TikTok a competitor for Disney Ad
19 Manager?

20 A Yes.

21 Q Why was building a complete proprietary ad server for
22 the entire Disney company important to the company?

23 A Similar to what I had mentioned previously, in order to
24 create differentiated products for Disney's properties, as
25 well as be able to do that at the speed required in order to

Read-In Deposition - J. Helfand

1 capture the market opportunity, we believe that building the
2 Disney ad server was an important investment.

3 Q What sort of differentiated products does it allow you
4 to create?

5 A Our programmatic capabilities is one example of a
6 differentiated product that we would build for the Disney
7 platform.

8 Q Can you explain what you mean by programmatic?

9 A "Programmatic" is an industry term for being able to
10 automate the transaction of ad inventory using a request
11 sent out over the web to a demand source and that demand
12 source sending an ad back and placing that into the ad
13 inventory.

14 Q Is Disney's having its own ad server good for
15 advertisers in your view?

16 A In my view, Disney having its own ad server is good for
17 advertisers for a number of reasons, one being that it
18 enables us to create those differentiated products for our
19 advertisers.

20 Secondly, it allows us to integrate the
21 advertising experience with the consumer experience that is
22 occurring in any of those content environments more
23 seamlessly.

24 Q And what does it mean to integrate the advertising
25 experience with the consumer's experience?

Read-In Deposition - J. Helfand

1 A So a lot of times when we're integrating ad technology
2 into a client app or a client that is delivering content,
3 making sure that the client is ad aware and being able to
4 pass signals between the client and ad server is an
5 important way to ensure that, as the consumer is interacting
6 with the content, we seamlessly move between the content and
7 ads in a way that delivers the most relevant and highest
8 quality experience for the consumer.

9 Q And so does Disney having its own ad server permit
10 Disney to create a better consumer experience?

11 A Yes. That is one of the objectives of having our own
12 ad server is to ensure the highest quality experience for
13 our consumers.

14 Q Do you know if Snap has its own ad server?

15 A Snap does have its own ad server.

16 Q You mentioned TikTok earlier. Does TikTok have its own
17 ad server?

18 A Yes, TikTok has its own ad server.

19 Q You consider Meta a publisher?

20 A Yes.

21 Q And I believe you said earlier Meta has its own ad
22 server.

23 A Yes.

24 Q Do you consider Amazon to be a publisher?

25 A Yes.

Read-In Deposition - J. Helfand

1 Q And they have their own ad server?

2 A They do.

3 Q Can the Disney ad server place ads on connected TV?

4 A Yes.

5 Q Can it place ads on mobile apps?

6 A Yes.

7 Q Can it place ads on desktop?

8 A Yes.

9 Q Can the Disney ad server place ads on video ads?

10 A Yes.

11 Q Can it place display ads?

12 A No.

13 Q Is it possible for the Disney ad server to place
14 display ads from a technological standpoint?

15 A Yeah. I mean, if we invested in developing the
16 capability, yes.

17 Q When you say, quote, traditional display, end quote,
18 what do you mean?

19 A When I -- when I think about display ad or I think
20 about -- or I think how the industry thinks about display
21 ad, it would be a -- it would be a static image on a page
22 adjacent to content as opposed to embedded in a piece of
23 video content. So similar to previously where we mentioned
24 a 300-by-250 or a skyscraper or some sort of other static
25 format or fixed-place format on a page or inside of a mobile

Read-In Deposition - J. Helfand

1 ad.

2 Q But a pause ad is a static image, correct?

3 A It is a static image. It is -- it -- it displays over
4 the top of the content until the viewer presses play again
5 on their content.

6 Q And the Disney ad server is capable of placing that
7 kind of ad, correct?

8 A It does.

9 Q Who did Disney use for its ad serving before you
10 brought it the ad serving function in-house?

11 A It used Google Ad Manager.

12 Q Does Disney have any plans to make its ad server
13 available to third-party publishers?

14 A No.

15 Q I'm going to show you what we will be marking Disney
16 Exhibit 7.

17 Do you recognize this document?

18 A It appears to be sales material.

19 Q Does it appear to be a true and accurate copy of this
20 document?

21 A To the best of my knowledge.

22 Q Can you go to page 453, and the title of this slide is,
23 quote, FY 21 display impressions by brand and by quarter.

24 Is that right?

25 A Correct.

Read-In Deposition - J. Helfand

1 Q Do you see on the left-hand side there it says
2 "display" in blue?

3 A Yes.

4 Q Could you read for me the language under there.

5 A "Static or rich media, animated or video, image units
6 within articles and stories. Hulu display impressions
7 include sponsored logos, pause, and marquee ads."

8 Q So are all of those type of ads display ads -- let me
9 try that question again.

10 So are all of those type of ads display ads in
11 Disney's view?

12 A They've categorized all of those as display ads on this
13 slide, yes.

14 Q We talked a little bit about DRAX before. Can you
15 remind me what DRAX stands for?

16 A DRAX stands for the Disney Real-Time Ad Exchange. We
17 like to name our products after Disney characters.

18 Q Do other ad exchanges or SSPs bid into the DRAX?

19 A Yes, through our distribution relationships with, say,
20 an Amazon or Roku. Their SSPs are integrated into DRAX.

21 Q Does DRAX compare bids from different demand sources?

22 A The comparison of demand sources happens primarily in
23 Magnite, and DRAX is helping to kind of facilitate how those
24 bids happen.

25 There's some level of auction that happens in --

Read-In Deposition - J. Helfand

1 in DRAX, but the -- because we have multiple SSPs, so it's
2 deciding amongst the SSPs, but the -- within any given SSP,
3 for instance, Magnite is making the bidding decisions
4 with -- amongst it's -- you know, within its portfolio of
5 bid requests and demand.

6 Q So the other SSPs you've referenced, that would be like
7 Amazon or Roku?

8 A Correct.

9 Q And DRAX compares bids coming through those SSPs with
10 Magnite's and decides amongst those?

11 A Correct. And there are -- there are rule sets with
12 respect to which inventory is available to Amazon versus a
13 Roku versus the rest of our ecosystem.

14 Q Do any DSPs bid directly into DRAX?

15 A No DSPs bid directly into DRAX.

16 Q Does DRAX have a relationship with The Trade Desk
17 directly?

18 A Yes.

19 Q What is that relationship?

20 A Trade Desk is one of our largest sources of demand,
21 programmatic demand. It's a demand-side platform. It
22 integrates into Magnite, and so all the demand that is
23 coming from The Trade Desk flows through the Magnite bidder.

24 Q Are you familiar with the phrase "ad network"?

25 A Yes.

Read-In Deposition - J. Helfand

1 Q What does that mean?

2 A Ad network is a -- you know, and what I would say is
3 kind of an early industry construct for the buying and
4 selling of advertising in an aggregated fashion.

5 Q Do ad networks, though, still exist today?

6 A I think you could make the argument that there are
7 still ad networks. Oftentimes ad networks, ad exchanges,
8 really, any aggregator of both buy- and sell-side and
9 typically intermediate and try to take a -- or sorry --
10 typically intermediate and try to take a -- you know, some
11 sort of transaction fee on that exchange is what I would
12 consider to be an ad network.

13 Q Can you give an example of an ad network that's in
14 existence?

15 A I can't largely because most of the market has moved
16 more towards -- moved for towards programmatic versus a kind
17 of a -- a more simple transactional network model.

18 Q You mentioned Disney likes to give good names to its
19 products. What is you Yoda?

20 A Yoda stands for Yield Optimization Delivery Algorithm.
21 And what Yoda is is an enhancement to our ad decisioning
22 logic that allows us to remove the waterfall, the priority
23 delivery of ads, and call the programmatic market at the
24 same time that we focus on delivering our direct deals and
25 being able to provide more inventory to the programmatic

Read-In Deposition - J. Helfand

1 markets while also ensuring that we deliver our -- our
2 direct deals to a, you know, certain threshold or guarantee
3 level. I think most simply it removes the waterfall
4 methodology.

5 Q Does that means it permits programmatic to buy
6 inventory that is otherwise spoken for by a direct deal?

7 A It would allow the same inventory that's available to
8 direct buys to also be available to a biddable -- to a
9 bidded market, to a bidded advertiser.

10 Q And is that functionality beneficial to advertisers?

11 A I would say it's beneficial to advertisers in that it
12 enables more access to inventory, especially coming through
13 the bidded marketplace. And in some instances, advertisers
14 are also -- they're buying both ways. They're buying
15 directly, and they're also buying programmatically.

16 Q Does it benefit Disney to have that Yoda functionality?

17 A The benefit for Disney of having Yoda is it allows us
18 to maximize fill of all of our available inventory and
19 ultimately maximize yield against that inventory.

20 Q I'm going to show you another exhibit. This has the
21 Bates TWC -- TWDC -- excuse me -- _GOOG_00076919. This will
22 be Disney Exhibit 9.

23 What is this document?

24 A This document is a product requirements document, or a
25 PRD, for the development of Yoda.

Read-In Deposition - J. Helfand

1 Q And do you recognize this as a true and accurate copy
2 of the Yoda PRD?

3 A To the best of my knowledge, yes.

4 MR. TEITELBAUM: And the next section is a
5 red box for confidentiality purposes. I'll just wait
6 for a signal from the Court that we're ready to proceed
7 after the red box section.

8 THE COURT: All right. Go ahead.

9 MR. TEITELBAUM: And for the record, the red
10 box section is page 75, line 12, to page 77, line 15.
11 Resuming at page 81, line 17.

12 Q This is Hulu-0000532. Do you recognize this document?

13 A Yes, I've seen this document.

14 Q What is it?

15 A It is -- it is a vendor evaluation attached to an RFP
16 or a request for a proposal.

17 Q And you said vendor RFP?

18 A Like a vendor evaluation in response to a request for a
19 proposal for an ad server.

20 Q That was my next question. So this is a request for a
21 proposal for an ad server?

22 A Yes.

23 Q Is it for -- for Disney's ad serving?

24 A Yeah, for Disney's ad serving.

25 Q And which vendors are being compared?

Read-In Deposition - J. Helfand

1 A It appears that this is comparing Google's capabilities
2 with Comcast's capabilities.

3 Q Which ad server did Disney ultimately select out of
4 this RFP process?

5 A Disney ultimately selected Google.

6 Q Do you recall when approximately the selection was
7 made?

8 A I believe but I'm not certain that it was made sometime
9 in 2019.

10 Q And, generally, do you view Google's ad server as a
11 high-quality ad server?

12 A I do.

13 Q I believe you testified earlier that Disney selected
14 Google Ad Manager server in 2019; is that right?

15 A Correct.

16 Q So, then less than three years later, Disney switched
17 ad servers a second time; is that correct?

18 A Correct.

19 Q Thank you for taking the time -- taking time to be here
20 today. I will try to streamline my questions so we don't
21 repeat too much of what you said earlier.

22 I want to start off by talking a little bit about
23 different forms of advertising, which we touched on earlier
24 today.

25 At Disney, do people commonly delineate amongst

Read-In Deposition - J. Helfand

1 different forms of advertising?

2 A Yes. We typically refer to advertising formats by --
3 you know, either video or display are the two primary
4 formats that are referred to; although, the vast majority of
5 our business is video.

6 Q And why within Disney's business do you delineate
7 between display and video formats?

8 A The -- they tend to be very different markets. So, you
9 know, in terms of how they're priced and the -- who are the
10 buyers of those -- so -- and in terms of the experiences
11 that we are developing for our consumers.

12 And so it's helpful to understand what type of,
13 you know, format you're referring to when talking about the
14 advertising that happens across the -- our various
15 properties. Although, again, you know, the vast majority of
16 where we focus is on video.

17 Q Do you have a rough estimate of what percentage of
18 Disney's advertising is video versus display?

19 A At the current time, our business is probably close to
20 90 to 95 percent video.

21 Q Has that been roughly consistent over the past five
22 years at Disney?

23 A It has. The display business has been shrinking over
24 time but as there is price compression and, you know, less
25 availability of that inventory.

Read-In Deposition - J. Helfand

1 MR. TEITELBAUM: The next section is red
2 boxed starting at page 102, line 10, to 104, line 8.
3 So we'll just wait until the Court is ready.

4 THE COURT: I'm not going to take courtroom
5 time on this. I'll have to review this in chambers.
6 Let's move this along.

7 MR. TEITELBAUM: I understand, Your Honor.
8 Resuming at page 125, line 14 through 25.

9 THE COURT: Yes.

10 Q And what's your understanding of Disney's scale as a
11 business?

12 A You know, I would say that Disney's scale in terms of
13 the size of its business, you know, in terms of -- you know,
14 both reach of the number of consumers in an unauthenticated
15 environment and also our subscribers that have signed up
16 for, say, our streaming services, you know, are in a -- you
17 know, combined in the hundreds of millions. So, you know,
18 I -- you know, I think that's -- if you want to use that as
19 a measure of scale, you know, that's sizable.

20 MR. TEITELBAUM: The next brief section is
21 under seal at Disney's request as are the rest of the
22 red boxes.

23 THE COURT: Go ahead.

24 Q We spoke a little earlier about -- or you spoke a
25 little earlier about the type of advertising inventory made

Read-In Deposition - J. Helfand

1 available on the ad server. Is display advertising
2 available for sale via the Disney ad server?

3 A It is not.

4 MR. TEITELBAUM: Once again, another
5 confidential section.

6 THE COURT: Okay. Go ahead.

7 Q My understanding is, based on your earlier testimony,
8 that Disney uses the Disney ad server for some properties
9 and Google Ad Manager as the publisher ad server for other
10 properties. Is that right?

11 A That is correct.

12 Q Are there any difficulties with Disney operating two
13 different ad servers within the company?

14 A It's not necessarily the most efficient way to operate
15 the business, in particular, from a campaign management
16 standpoint. To set up campaigns to deliver in two ad
17 servers means you need to set them up twice. And so that
18 is, you know, one challenge from an efficiency standpoint.

19 Also, getting aggregated data back to understand
20 in aggregate how a campaign is performing where you are --
21 where you are versus your delivery goals, things like that,
22 can also be increasingly complex if that information is
23 coming from more than one ad server.

24 I would also say the ability to aggregate
25 audiences and sell them across multiple properties is most

Read-In Deposition - J. Helfand

1 efficient when you're doing that on one ad server.

2 Q Does Disney use multiple ad servers for a single
3 property?

4 A By and large, no. The vast majority of properties are
5 either on Google Ad Manager or on the Disney ad server.

6 Q Why is that?

7 A For the same reasons that I stated before. Trying to
8 manage the experience in a -- you know, for a given
9 advertiser on one property, if you had to use multiple ad
10 servers, is not a very efficient way to deliver advertising.

11 Q And Disney uses Google Ad Manager, previously known as
12 DFP, to sell all of its display advertising; is that right?

13 A That is correct.

14 Q With respect to the display advertising, do you know
15 what portion of Disney's display ads are sold by AdX?

16 A The vast majority. The -- I would say more than half
17 of Disney's display advertising is monetized through Google.

18 MR. TEITELBAUM: The next page approximately
19 is confidential.

20 THE COURT: All right. Go ahead.

21 Q You spoke earlier that the majority of Disney's display
22 advertising inventory is sold via AdX; is that right?

23 A Via -- yes, via Google programmatic.

24 Q Okay. Do you know the names of any other exchanges
25 through which Disney programmatically sells display

Read-In Deposition - J. Helfand

1 advertising?

2 A I do not.

3 Q And who picks the order in which Google Ad Manager
4 reaches out to different SSPs?

5 A The publisher sets the order.

6 Q And how is that order set?

7 A At any given point in time, the publisher could
8 determine which SSP, based on what they think the price may
9 be, that the publisher is going to pay for for inventory or
10 some other factor that allows them to, you know, determine
11 that this is the order that they should make the inventory
12 available.

13 MR. TEITELBAUM: The next roughly page and a
14 half is confidential.

15 THE COURT: All right. Go ahead.

16 Q Has Disney ever asked Google to have AdX bid into DRAX?

17 A We have tried to implement DRAX into AdX, but we
18 haven't been able to do so successfully.

19 Q Why not?

20 A I do not know.

21 Q Would Disney like to be able to integrate DRAX with
22 AdX?

23 A We -- we would like to. Yes, we would.

24 Q Are there technical difficulties in doing so?

25 A I do not know.

Read-In Deposition - J. Helfand

1 Q Has Google indicated any willingness to integrate AdX
2 with DRAX?

3 A We have attempted to integrate but have not been able
4 to -- been able to reach the level of performance that we --
5 we would through Disney ad server.

6 Q What do you mean by you haven't been able to reach the
7 level of performance you would through Disney ad server?

8 A So we wouldn't have been able to -- through the
9 integration of our programmatic capability through Google Ad
10 Manager, we don't have the same performance in terms of the
11 ability to get bidded demand back into that -- return back
12 to the Disney ad server at the same fill rates as we do when
13 we have the DRAX and the Disney ad server.

14 Q Is this what you meant when you said the fill rates
15 when using Google Ad Manager are significantly lower than
16 when using Disney ad server?

17 A Yes.

18 Q Why are the fill rates significantly lower on Google Ad
19 Manager than Disney ad server?

20 A I do not know.

21 MR. TEITELBAUM: That concludes the read-in
22 of this deposition.

23 We have another one ready, Your Honor, with the
24 Court's permission.

25 THE COURT: The next one is out of

Read-In Deposition - S. Schiekofer

1 California?

2 MS. WOOD: This next deposition read-in
3 should be only about 15 minutes, I would estimate.

4 THE COURT: No, it's not the California one?
5 It's a new book, or is it in this --

6 MS. WOOD: A new book.

7 THE COURT: Oh, all right.

8 MR. TEITELBAUM: Your Honor, somewhat similar
9 to the previous deposition, with no objection from
10 Google, we would offer into evidence PTX 1720, and we
11 do have copies for the Court.

12 THE COURT: All right. Any objection to
13 1720?

14 MS. SESSIONS: No, Your Honor.

15 THE COURT: All right. It's in.

16 MS. SESSIONS: And Google will also move to
17 admit with no objection from the government DTX 1045
18 and DTX 1499.

19 THE COURT: All right. 1045 and 1499?

20 MS. SESSIONS: Yes, Your Honor.

21 THE COURT: All right. They're in.

22 MS. SESSIONS: Thank you.

23 (The deposition of Susan Schiekofer is read as
24 follows:)

25 Q Will you start by just stating and spelling your name

Read-In Deposition - S. Schiekofer

1 for the record.

2 A Susan Schiekofer, S-U-S-A-N, S-C-H-I-E-K-O-F-E-R.

3 Q And today you work at GroupM; is that right?

4 A Yes.

5 Q What's your title -- what's your title at GroupM?

6 A Chief digital investment officer.

7 Q Can you give us a brief description of your
8 responsibilities?

9 A I have a small team at the center of GroupM. And
10 there's agencies at GroupM, and clients sit within agencies.
11 And our team at the center works with the client teams to
12 figure out what are the partners that we want to do business
13 with in terms of things like pricing first to markets,
14 research, basically to provide value for the clients, for
15 the money that they're spending across GroupM and the
16 agencies.

17 Q When did you first start working at GroupM roughly?

18 A In 2010.

19 Q Does GroupM have different teams that focus on
20 different types of advertising?

21 A Okay. We do. There's broad strokes. There's planning
22 groups. There's buying groups, and there's measurement
23 groups. There's all kinds of things in the middle. But
24 what clients hire us for are to look at their audiences and
25 plan audiences accordingly, to purchase media ranging from

Read-In Deposition - S. Schiekofer

1 national television, syndicated television, cable, local,
2 radio. It could be national, could be local, DR TV, print,
3 outdoor, and digital, in all forms.

4 Q So one of the things that you mentioned is that the
5 planning groups will allocate by channel?

6 A Yes.

7 Q What channels are you referring to?

8 A Television. You know, these are very broad. It really
9 varies by client. But it will be anything from television,
10 including the Super Bowl, to radio. It could -- local or
11 national radio. And then it will be digital, you know,
12 whether it's video display, search, social. And then
13 programmatic is an activation of that supply.

14 Q What differences, if any, are there between display
15 advertising and connected TV advertising?

16 A So display usually -- usually runs on just regular
17 websites.

18 Q Why do you say the math of display is a lot more
19 efficient than video?

20 A We're not going to pay a lot of money for display
21 advertising. We're not going to pay -- you know, if I use
22 \$25 as a, you know, standard -- and I can't disclose exactly
23 what the number is, but, you know, there's a range -- like
24 Super Bowl, you're going to pay a lot more CPM than you're
25 going to pay on, like, "The Today Show." But generally,

Read-In Deposition - S. Schiekofer

1 video commands a higher premium because there's also less
2 scale. You know, display, there's almost, like, infinite
3 scale available.

4 Q What do you mean there's almost infinite scale
5 available for display?

6 A Because any website could have, you know, five display
7 ads on a particular page if you look at the long tail of
8 websites. But if you're a quality video producer, you don't
9 have to go into long tail, right? Like, if you're NBC,
10 you're going to distribute on NBC. You're going distribute
11 on nbc.com or Fandango or YouTube.

12 Q One of the things I think you said was display was a
13 complement. And what did you mean? A complement to what?

14 A I mean it's a complement to an overall buy. Again,
15 like, a client that spends a lot of money in market that has
16 a combination of brand and efficiency goals will use a mix
17 of media as broad as network television and, like, all the
18 way through to search, right, as their narrow to search.

19 So it's really -- you know, it's what clients
20 think. Like, a combination of it's the creative. It's the
21 media, and it's the offer. So what do those three -- what's
22 the most efficient way? And, again, this is where the
23 planners use syndicated research to find the audiences.

24 They develop the channels, and then the buyers
25 will go and pick the individual properties within those

Read-In Deposition - S. Schiekofer

1 channels, right? And if it's an only-display campaign, we
2 do those too. But they're just not as prevalent with the
3 types of advertisers that we have.

4 Q Why do you say that it's not as common, I guess, for
5 GroupM to do only display campaigns?

6 A It's -- our client base is big, important brands, and
7 they use a combination of video, audio, display. And
8 display could also be print and newspaper, right, like a
9 printed form of communication. So it depends what the
10 messaging is and do they have the creative, you know, for
11 video or only display or printed word or audio, podcasting.

12 Q What differences, if any, are there between display and
13 social?

14 A Well, social can have display, right? So social has a
15 combination of video formats. And then they could also just
16 have a display ad that runs in the feed. It's either called
17 static -- it could be called rich media, but that's
18 considered display.

19 Q Let me ask you: What differences are there, if any,
20 between social and programmatic?

21 A So social -- well, social is also bought
22 programmatically, but it's in platform with the individual
23 social companies.

24 Q From what you were saying before, it sounds like GroupM
25 recommends for its clients at least some of the time that

Read-In Deposition - S. Schiekofe

1 they buy ads on the open web. Is that fair?

2 A We don't use the words "open web." We call it
3 exchanges.

4 Q And then so why -- why would you recommend for some
5 clients that buying through -- buying display through an
6 exchange would be the best option?

7 A It's back to being able to deliver audiences at scale
8 at a cheap CPM. And if we apply -- which most of our
9 clients want us to apply -- what we call our inclusion list,
10 then it allows us to build a variation of that marketplace
11 that's brand suitable for us and for our clients at a very
12 cheap CPM.

13 Q One of the things I think you said a minute ago was if
14 you see one exchange perform better than another, you
15 optimize toward the better-performing exchange?

16 A Uh-huh.

17 Q Did I get that right?

18 A Uh-huh.

19 Q What do you mean by that?

20 A Within a DSP, you have the ability to buy lots and lots
21 of exchanges. So an exchange could be -- it could be AdX.
22 It could be Magnite. It could be PubMatic. It could be
23 Yieldmo. And there's, like, a SpotX. There's, like,
24 Spot -- like, there's just a ton of exchanges. There's a
25 lot of people who have built exchanges.

Read-In Deposition - S. Schiekofers

1 What we do and what my team at the center does is
2 to evaluate, like, it -- because we don't want to just buy
3 the same exchanges over and over against the same audiences
4 because then you're just going to bombard the consumer with
5 ads, like the same ads, and that's usually a negative. So
6 you want to make sure that it's controlled.

7 So what our team does is to take a look at
8 inventory. Is it unique? Is it quality? Is it
9 differentiating from another exchange?

10 So we tend to have, you know, a small group of
11 exchanges that we consider preferred, but I would say
12 preferred is a loose term with exchanges because there's so
13 much in them. They're not going to be as preferred and,
14 say, like an NBC, but they're, like, a preferred exchange
15 because we know they do a good job of, you know, vetting
16 who's in the exchange, working with us in terms of applying
17 our inclusion and exclusion lists.

18 And, like, they're just companies that are
19 developing tech and audiences, and they do a better job than
20 others.

21 Q What are the preferred exchanges at least that you
22 remember?

23 A For us, we tend to work with the ones that I mentioned,
24 AdX, PubMatic, Magnite, Yieldmo, some smaller ones like
25 AdTheorent.

Read-In Deposition - S. Schiekofer

1 When GroupM designates a particular exchange as a
2 preferred exchange and tries to shift advertising to that
3 exchange, where is that advertising primarily shifted from?
4 Is it primarily shifted from other exchange --

5 THE LAW CLERK: I'm sorry.

6 MS. WOOD: I'm sorry. I think that was me.

7 Q When GroupM designates a particular exchange as a
8 preferred exchange and tries to shift advertising to that
9 exchange, where is that advertising primarily shifted from?
10 Is it primarily shifted from other exchanges or from another
11 type of advertising that doesn't go through --

12 A Oh, I see.

13 Q -- an exchange?

14 A Sometimes, right. Like, it could come from another
15 exchange. And, again, based on performance, if one exchange
16 is performing better than another exchange, right, you could
17 shift that money into an exchange.

18 But, generally, digital budgets are just growing.
19 You know, linear budgets are shrinking, and digital budgets
20 are growing. So usually it just comes from new money into
21 the channel.

22 Print -- you know, print has sadly declined
23 dramatically through the years, and the money goes to
24 digital. Audio is holding steady, but they have had a rough
25 ride the last ten years.

Read-In Deposition - S. Schiekofe

1 Q Why do you say that search and programmatic are two
2 different objectives?

3 A Because the clients can see it that way. It's a
4 different medium. I mean, programmatic -- programmatic is
5 an activation of inventory. Search is its own discovery
6 platform. Programmatic is not a discovery platform; it's
7 monetization of content.

8 Q Does GroupM ever do deals with exchanges under which
9 the exchange lowers its take rate?

10 A Yes.

11 Q Can you describe how those deals work? And, again,
12 focusing on the deals that apply to programmatic open-web
13 display.

14 A I can't speak to the deals that they have with
15 publishers because that's their deal. But we do know that,
16 like, if they're taking a 40 percent margin, that means our
17 clients are not getting the value of that inventory. Like,
18 then it's 40 percent less impressions for our clients. So
19 we do ask exchanges to cap at something more reasonable. I
20 think the --

21 THE COURT: Go ahead.

22 A You know, any exchange that we work --

23 THE COURT: Keep going. It's all right.

24 A And then, you know, there's the option to look at the
25 books, right? But you can tell just by what you're paying

Read-In Deposition - S. Schiekofe

1 in market. If all of a sudden you're getting a lot less
2 impressions and the quality of the sites is low, then you
3 know that they're taking a lot of margin.

4 Q How successful has Google's DoubleClick been in the ad
5 server business?

6 A They're a good ad server. Yeah, it's a good company.
7 It was a good company back then. There's others. Again,
8 like, they're not the only ad server but they're -- you
9 know, they're a quality ad server.

10 Q What benefits, if any, are there to an advertiser to
11 using both search and display together for the same
12 campaign?

13 A Reaching a broader audience, reinforcement of a
14 message. I mean, one's active; one is less active. Search
15 is an active discovery, but then display is a remainder --
16 is a reminder medium.

17 Q And why do you say that if the advertiser's objective
18 is broad reach that both social and display through an
19 exchange would achieve that?

20 A Because it's -- you're getting the consumer in two
21 different channels that they're likely to be heavy consumers
22 of. They're not heavy consumers of display; they're heavy
23 consumers of particular websites that have display ads.

24 Q Why would using both social and display for a
25 particular campaign help that advertiser achieve broader

Read-In Deposition - S. Schiekofe

1 reach?

2 A Again, distribution of channels in messaging.

3 Q For an advertiser that wants to have as broad a reach
4 as possible, do you view social and display purchased
5 through an exchange as complements or substitutes, or how do
6 you see it?

7 A So social and exchange as --

8 Q Complements or substitutes for an advertiser who wants
9 to have broad reach?

10 A I would say complements.

11 Q Why?

12 A Well, search is not that huge. Again, it's, like, one
13 to one. And then exchange-based display, I think it's going
14 to be depending on the media that they consume, right? If
15 you don't look at anything besides social, then, okay,
16 social is fine.

17 But if you're somebody who uses, you know, social
18 for one reason but then goes on particular websites for
19 others, you're going to get people in both ways. Or
20 somebody -- you know, there's also audiences that don't look
21 at social media at all, right? So then you need to have
22 display.

23 Q Was the answer that you just gave about social plus
24 display or social plus search?

25 A Oh, it kind of applies to both.

Read-In Deposition - S. Schiekofer

1 Q So let me ask: For advertisers who want to have a
2 broad reach, do you view social and display bought through
3 an exchange as complements or substitutes?

4 A Complements.

5 Q Okay. And just briefly again, what's the reason for
6 why?

7 A It extends the audience, right? There's the social --
8 heavy social users, and then they can go on a website and
9 see a reinforcement of the message. Or they're not on
10 social and you want to get them on display.

11 Q For display purchased through an exchange, can you give
12 us a breakdown of what the largest exchanges are for GroupM?

13 A For GroupM, it would be AdX, Magnite, PubMatic,
14 Yieldmo. Those are the main ones. And then there's, like,
15 a long tail of smaller ones, but that's what -- the stuff we
16 try to limit unless there's a unique data point.

17 Q And for display purchased through an exchange for
18 GroupM, what is the largest exchange?

19 A I would say AdX.

20 Q For display purchased through an exchange, how much
21 larger would AdX be than the number two exchange?

22 A Not much. OpenX, that's the other one I couldn't think
23 of. That's the other one we work with.

24 Q Why do you say that some of GroupM's clients would
25 prefer to be able to buy YouTube through a DSP other than

Read-In Deposition - S. Schiekofer

1 DV360?

2 A They'd just use other DSPs, but it's same thing. It's
3 not just about YouTube. It's the same thing with Disney or
4 ABC. Not everyone uses every single DSP. It's not
5 universal. There's different deals for different
6 publishers. It's like, in a perfect world, everybody would
7 be available everywhere, but that's not -- that's not the
8 industry.

9 Q Are you familiar with the term "return on investment,"
10 or ROI for short?

11 A Yes.

12 Q Does GroupM provide advice to its advertiser clients on
13 how to allocate advertising spending?

14 A Yes.

15 Q Does that advice include how to achieve the objective
16 of maximizing ROI?

17 A Yes.

18 Q Do advertisers allocate spend between digital
19 advertising and other types of advertising based on the
20 objective of maximizing ROI?

21 A Yes.

22 Q Does GroupM provided advice to its clients on how to
23 allocate advertising spend between digital advertising and
24 other types of advertising to achieve the objective of
25 maximizing ROI?

Read-In Deposition - S. Schiekofer

1 A Yes.

2 Q Do you have any reason to doubt that Exhibit 5 is a
3 true and correct copy of the slide deck title "U.S. Media
4 Landscape, Q2 '21"?

5 A No.

6 Q Does GroupM create presentations like this in the
7 ordinary course of business?

8 A Yes.

9 Q Was this document intended to give guidance to the
10 group and the team?

11 A Yes. I mean, various groups do variations of this
12 particular document. So they're meant to keep everybody up
13 to date on media trends.

14 Q I'm marking a document titled "Programmatic 201" as
15 Exhibit 6. The rest of the title of the document is
16 "Evolving programmatic approach, March 2023." And there's a
17 GroupM Bates stamp in the lower right-hand corner with five
18 zeros and then ending in 350.

19 Do you have any reason to doubt that Exhibit 6
20 produced to the Department of Justice by GroupM is a true
21 and correct copy of the slide deck titled "Programmatic
22 201"?

23 A No.

24 Q Are these types of presentations created in the
25 ordinary course of GroupM's business?

Read-In Deposition - S. Schiekofer

1 A Yes.

2 Q This, again, is a long document, but I only have
3 questions on one page. And that's page ending in 409, so
4 near the end of the presentation. The native pagination is
5 60.

6 Do you see that title of the slide, "Publisher
7 inventory can be accessed in multiple ways"? Did I read
8 that correctly?

9 A Uh-huh.

10 Q The next set of text on the slide reads, "Inventory can
11 be accessed directly from exchanges en masse or exchanges
12 can facilitate deals with specific partners for a more
13 focused set of supply."

14 Did I read that correctly?

15 A Uh-huh.

16 Q Does "inventory can be accessed directly from exchanges
17 en masse" refer to open exchange?

18 A On this page, yes.

19 Q Is open exchange in your understanding another term for
20 open auction?

21 A Yes.

22 Q Do some publishers sell inventory through both open
23 exchange and deals?

24 A Some, yeah.

25 Q Does GroupM buy inventory through deals on behalf of

Read-In Deposition - S. Schiekofe

1 its advertiser clients?

2 A Yes.

3 Q Does GroupM evaluate ROI for its clients' campaigns
4 when buying inventory through deals?

5 A Yes.

6 Q Does GroupM buy inventory through open auction?

7 A Yes.

8 Q Does GroupM evaluate ROI for its clients' campaigns
9 when buying through open auction?

10 A Yes.

11 Q Does GroupM compare ROI of buying advertising through
12 these two types of transactions?

13 A Yes.

14 Q Does GroupM ever shift between these transaction types
15 based on its evaluation -- ever shift spend between these
16 transaction types based on its evaluation of ROI?

17 A Yes.

18 Q Does GroupM have a contract with Google to make
19 purchases on DV360?

20 A Yes.

21 Q Does GroupM have a contract to make purchases -- a
22 contract with Google to make purchases on Google Ads?

23 A Yes.

24 Q Did GroupM negotiate the DV360 contract?

25 A Yes.

Read-In Deposition - S. Schiekofer

1 Q Did GroupM negotiate Google Ads contract?

2 A Yes.

3 MS. WOOD: That's it for that deposition,
4 Your Honor.

5 THE COURT: All right. I think given the
6 hour we're going to be closing down for tonight. So
7 let's make sure we've got all the exhibits in.

8 Now, I just want to hear what's the schedule for
9 tomorrow.

10 MS. WOOD: So tomorrow morning, Your Honor,
11 we have Mr. Spencer, who is -- has the coveted reserve
12 slot at 9:00 a.m. Then we will continue with
13 Dr. Abrantes-Metz. Then we will have Mr. Wheatland,
14 and then we have a bunch of read-in and possibly video
15 depositions in the afternoon.

16 THE COURT: I recognize Spencer's name, and
17 the second, who is Mr. Wheatland?

18 MS. WOOD: Mr. Wheatland is from the *Daily*
19 *Mail*. He is our publisher witness.

20 THE COURT: I think it's getting cumulative
21 at this point. Unless either publisher witnesses or
22 advertiser witnesses have something really new to say,
23 I don't think there's any need to keep calling them.

24 MS. WOOD: We understand that, Your Honor.
25 He is our final publisher witness, and we have taken

1 that into account in his examination, Your Honor.

2 THE COURT: All right. And where are we on
3 your schedule?

4 MS. WOOD: Pretty much exactly where we
5 thought we would be with the one possible exception of
6 some of the depositions. But after Mr. Wheatland, we
7 anticipate that on Thursday morning there will be
8 Mr. Bellack, another adverse witness who could only go
9 on that Thursday morning slot. Then we have two
10 experts left and --

11 THE COURT: And that's it?

12 MS. WOOD: And that's it other than the
13 depositions.

14 THE COURT: All right. Well, again, among
15 the depositions, who are the deponents?

16 MS. WOOD: There are a number of -- a couple
17 of more third parties but mostly Google witnesses left
18 as deponents.

19 THE COURT: And, again, even though they may
20 be Google witnesses, if they're cumulative, I don't
21 have to hear them.

22 MS. WOOD: Understood, Your Honor.

23 THE COURT: All right. So it sounds to me
24 like Google should get ready to be putting on some
25 evidence by the end of the week.

1 MS. SESSIONS: Yes, Your Honor, we will be.

2 THE COURT: All right.

3 MS. RHEE: Your Honor, if we could be heard,
4 we do agree with the cumulative nature of the multiple
5 third-party witnesses. So we'll just leave it at that.

6 THE COURT: All right. Let's get the
7 exhibits that were introduced today into the record.

8 THE COURT CLERK: PTX 110, pages 1 and 009
9 through 0011; PTX 132; PTX 324; PTX 278; PTX 520;
10 PTX 363; PTX 401; PTX 402; PTX 536; PTX 460; PTX 423;
11 PTX 858; PTX 737; PTX 815; PTX 857; PTX 1545; PTX 478;
12 PTX 545; PTX 588; PTX 605; PTX 734; PTX 897; PTX 929;
13 PTX 1014; PTX 284; DTX 277; DTX 172; DTX 372; PTX 791;
14 PTX 199; PTX 835; DTX 843; DTX 181; DTX 517; DTX 384;
15 DTX 682; PTX 1600; PTX 1501; DTX 358; DTX 422; DTX
16 1487; PTX 1835; DTX 1207; DTX 1374; PTX 1720; DTX 1045;
17 DTX 1499.

18 THE COURT: Ms. Wood, does the government
19 think we've missed any?

20 MS. WOOD: That is consistent with our
21 records, Your Honor.

22 THE COURT: All right. How about Google?

23 MS. SESSIONS: Yes, as with ours.

24 THE COURT: Excellent. All right. So we
25 will start up tomorrow, which is Wednesday, at 9:00.

1 There's nothing going on in court. Right now I think
2 Thursday is probably the only morning when you may have
3 to clean your desks.

4 Friday, I think we've cleared the docket. So I
5 think Friday may just be a clean start at 9:00. I'll keep
6 you posted.

7 All right. Anything further? No?

8 MS. WOOD: Nothing for the plaintiffs.

9 THE COURT: All right.

10 MS. SESSIONS: Not from Google, Your Honor.

11 THE COURT: We'll recess court for the
12 evening.

13 (Proceedings adjourned at 5:56 p.m.)
14 -----

15

16

17

18

19

20

21

22

23

24

25

I certify that the foregoing is a true and
accurate transcription of my stenographic notes.

/s/

Rhonda F. Montgomery, CCR, RPR